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AN ANALYSIS OF THE OUTCOME OF PREDICTIONS OF DELINQUENCY
BASED ON ONE HUNDRED CASES OF THE CAMBRIDGE-SOMERVILLE YOUTH STUDY
FOR THE PERIOD 1938 TO 1947

A Thesis

Submitted by

Donald Douglas Dowling

(B.S., Boston University School of Education, 1942)

In Partial Fulfillment of Requirements for the Degree of
Master of Science in Social Service

1947

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ACKNOWLEDGMENT

The writer wishes to express his gratitude to Mr. Edwin Powers, Executive Secretary of the Cambridge-Somerville Youth Study without whose collaboration this study would not have been possible.

Mr. Powers worked with the writer in selecting the sample, formulating a scale upon which the cases in the study could be rated in terms of delinquency status, and in the laborious task of rating a large number of cases. In addition, Mr. Powers was very helpful throughout the whole project in giving the writer the benefit of his criticisms.

CHAPTER I

INTRODUCTION

There is a major crime committed in the United States on the average of every eighteen seconds, every day and every night of the year. Murder, rape, felonious assault, robbery, burglary and larceny compose the daily¹ grist for the criminal mill.

During 1946 males and females under twenty-one years of age arrested and fingerprinted constituted 16.9 per cent of the total arrests. An additional 17.3 per cent were between the ages of twenty-one and twenty-four, making a total of 34.2 per cent less than twenty-five years old. In the same year, of the persons of all ages arrested for burglary, robbery, larceny, auto theft, embezzlement, fraud, forgery, counterfeiting, receiving stolen property, and arson, 31.5 per cent were less than twenty-one years old. Persons less than twenty-five years of age numbered 54.5 per cent of those charged with robbery, 60.4 per cent of those charged with burglary, 46 per cent of those charged with larceny, 74.6 per cent of those charged with auto theft. More than one half of all crimes against property during 1946 were committed by persons under twenty-five years of age. It should be remembered that the number of arrest records is doubtless incomplete because of the practice of some jurisdictions not to fingerprint youthful² offenders.

¹ Federal Bureau of Investigation, Uniform Crime Report, Annual Bulletin, 1946, pp. 77-78.

² Ibid, p. 117.

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OF THE
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FOR THE YEAR 1897

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COMMISSIONER OF
THE CITY OF NEW YORK
HAS THE HONOR TO ANNOUNCE
THAT THE RECORD OF THE
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YEAR 1897, HAS BEEN
PREPARED AND IS NOW
READY FOR DISTRIBUTION.
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IT CONTAINS A
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It is also well known that many offenses are committed by both official and unofficial youthful offenders which do not become a matter of police record.³

When these last two factors are considered, it is obvious that there is a great deal of delinquency and crime among young offenders which goes undetected.

It is generally agreed that the majority of criminals of today has been recruited from the ranks of the youthful offenders of yesterday, and so the criminals of tomorrow are now obtaining their education and experience in the ranks of today's delinquents.⁴

Figures of the total cost of delinquency and crime in the United States are extremely inaccurate and are no better than mere guesses ranging from the millions of dollars to the billions. There is no question, however, that it represents a tremendous expenditure on the part of the American taxpayer.⁵

In view of the extent and seriousness of delinquency and crime in terms of human and economic loss, it becomes a matter of the utmost concern to society to discover the young delinquent of today, and in

³ Fred J. Murphy, and others, "The Incidence of Hidden Delinquency," The American Journal of Orthopsychiatry, 16:686, October, 1946.

⁴ Eleanor T. Glueck, "The Family, the School and Crime," Vital Speeches of the Day, 1:515, May 6, 1935.

⁵ Harry Elmer Barnes and Negley K. Teeters, "New Horizons in Criminology," The American Crime Problem, (New York, Prentice Hall, Inc., 1943) p. 79.

fact endeavor to locate him before he has an opportunity to develop into a full-fledged delinquent. Once the community has discovered the young pre-delinquent, it is in a more favorable position to break the developmental chain leading to delinquent careers and crime. In a program of prevention it would be of paramount importance to be able to assert with reasonable confidence that an individual child or group of children would or would not adopt delinquency as an habitual mode of adjustment. It is evident that the younger the child the greater would be the possibility of preventing him from developing anti-social patterns assuming that present-day therapeutic measures are effective in this regard.

The Cambridge-Somerville Youth Study, hereafter called CSYS, is concerned with both these problems: (1) "spotting" the child who is likely to become delinquent and (2) conducting a program directed at preventing him from following such a career. This study in prediction used material from the CSYS which was established in 1935 by Dr. Richard C. Cabot to investigate what could be done to prevent delinquency among a selected group of boys from Cambridge and Somerville, Massachusetts. It was hoped that this objective might be achieved through a long-term (i.e., ten year) contact with wise and friendly counsellors. The period from 1935 to 1939 was devoted to the many processes involved in the selection of the treatment and control groups of boys. This process is described in greater detail in Chapter III.

The treatment program was launched in 1939 and continued to the end of 1945 which was four years short of the projected ten-year period.

However, the predictions of delinquency were made in 1938-1939 based upon material gathered in 1936, 1937 and 1938. The present study is interested only in the problem of finding the children who are likely to become delinquent. The evaluation of the whole CSYS program is left to other projects now underway.

The question of "spotting" the pre-delinquent is essentially a problem in prediction, or the probabilities that a given child will or will not become a delinquent. There are essentially two methods of prediction: (1) the actuarial or statistical approach and (2) the case study method.

Statistical or actuarial predictions of individual behavior assume that the prediction is made in reference to a specified group of individuals upon whom certain measures, based on comparable data, are available.

The prediction made must place the predicted person somewhere in the group so that we can say that a given percentage of the group will be higher and a given percentage lower on the prediction scale than he.⁶

The actuarial type of prognostic measures has been widely applied to such areas as vocational and educational adjustment, marriage and personality adjustment, parole, probation, criminality and juvenile delinquency. It has been demonstrated that it is possible to construct prognostic tables for the administration of criminal justice. Illustrations of these prognostic devices will be found in the various works

⁶ Paul Horst, and others, "The Prediction of Personal Adjustment," Social Science Research Council, 1941, p. 26

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of the Gluecks, and others.

The Gluecks and other writers have been concerned with attempting to predict an individual's response to various types of penal correctional treatment or post-treatment behavior and the prognostic tables are designed to predict response to treatment. Although the Gluecks have discovered a great deal about delinquents, they have not as yet established a prognostic instrument which would be useful in determining whether or not a young child, or group of children, would follow delinquent careers.

So far as this writer has been able to determine, no efforts have been made to predict delinquency systematically for a sizeable group of young children and it is believed that the CSYS is the pioneer in the effort empirically and systematically to predict delinquency as such for the individual case.

The purpose of this study is to determine the validity of certain predictions of delinquency which were made on a group of 650 boys under the age of twelve at the CSYS in 1938 and the factors upon which the predictions were based. The basic question this study seeks to answer

7 Sheldon and Eleanor T. Glueck, 500 Criminal Careers, (New York, Alfred A. Knopf, Inc., 1930).

8 E. W. Burgess and J. Landesco, Parole and the Indeterminate Sentence, Illinois State Board of Parole, 1928.

Captain Alexander J. N. Schneider, "Prediction of Behavior of Civilian Delinquents in the Armed Forces," Mental Hygiene, 28:1-20, July, 1944.

George B. Vold, "Prediction Methods Applied to Problems of Classification Within Institutions," Journal of Criminal Law and Criminology, 26:202-209, July, 1935.

is concerned with whether or not it is possible, given certain data, to predict delinquency behavior by the method used at CSYS which was essentially the case study method, or the non-statistical approach as contrasted with the actuarial prediction method. A few questions to be answered might be: How accurate were the predictors? Where did they fail and why? What were the factors which were considered to be of predictive significance? Which of these factors, if any, actually did discriminate between the delinquent and non-delinquent population? What implications, if any, are there regarding the etiology of delinquency?

In addition, this study has been undertaken as a preliminary investigation to determine if there are any findings of sufficient significance to warrant the time and expense of a more detailed and comprehensive study of the prediction of delinquency. Another consideration was the possibility that there might be some implications for the evaluation of the treatment program since this particular study deals with both the treatment and control groups and it would be expected that the treatment group would have significantly fewer delinquents than the control group if the treatment program had been adequate.

CHAPTER II

METHOD OF PREDICTION USED BY SELECTION COMMITTEE

The data upon which the present study is based were obtained from the files of the CSYS which was established in the fall of 1935 by Dr. Richard C. Cabot.

As originally stated, the Study had two fundamental objectives:

(1) the prevention of delinquency by the employment of wise and friendly "counsellors" who would deal with a selected group of boys over a long period of time; (2) the measurement of the effectiveness of this work, which covered the period from May, 1939 through December, 1945, by comparing the end results in the group selected for treatment with other boys in a carefully constructed control group which would be substantially similar to the treatment group but which would receive no¹ help or guidance from the Study during its existence.

Later, the "treatment objective" of the CSYS was formulated as follows:

The Cambridge-Somerville Youth Study is established to bring about and foster in a chosen group of boys by intensive individual help and guidance a continuing social, physical, intellectual and spiritual growth through which the boys will be assets to society and themselves, and, in particular, not sources of trouble or concern to others through behavior.²

The Study, then, is concerned with two groups of boys; a treat-

¹ Edwin Powers, Executive Secretary, Cambridge-Somerville Youth Study, Unpublished manuscript. Much of the material in this chapter was obtained from this work.

² Edwin Powers, Cambridge-Somerville Youth Study Manual.

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ment group and a control group which were originally obtained by a complicated and elaborate selection and matching procedure from a larger group of more than nineteen hundred boys under the age of twelve. The majority of these nineteen hundred boys was referred by the parochial and public grade schools of Cambridge and Somerville, Massachusetts. After two boys were paired by the matching process on the basis of I.Q., personality and social background, a coin was tossed to determine which of them would fall into the treatment group and which into the control group. Eventually 650 boys were thus divided into two groups of 325 each.

The first step involved, in the establishment of the treatment and control group, was to obtain a large number of boys who were both "difficult" and "average".³ The greatest number of referrals came through the schools but since the Study desired to discover as many "pre-delinquents" as possible in the cities of Cambridge and Somerville, social agencies, probation officers, police officers, etc. were asked to submit names. Thus, although the resulting list of over nineteen hundred names contained a large proportion of "average" boys it also included a greater number of "difficult" boys than would be found in an unbiased sample of the population. Although the age range was from five to twelve, most of the boys selected were between the ages of nine and twelve.

³ The words "difficult", "minus" and "pre-delinquent" are used synonymously; likewise, "average", "non-delinquent", and "plus" boys which refer to a boy whose tendency was away from a delinquent career.

As the second step, a great variety of information concerning each of the boys was obtained including mental and physical tests, home visits, questionnaires, teacher interviews and reports, and official records of schools, courts and other public and private agencies.

This information consisted of the following data:

1. Record of Stanford-Achievement Test
2. Record of Kuhlmann-Anderson Group Intelligence Test.
3. Record of physical examination. In addition, a schedule was filled out by the doctor and the nurse dealing with the general impressions of the child's personality during the examination.
4. A school photograph of the boy.
5. A Haggerty-Olson-Wickman Schedule.
6. Board of Probation record, if any, on parents, the boy and siblings.
7. Social Service Index record, if any.
8. Brief summaries of the record on the boy or family in the files of other agencies, if any.
9. Home visitor's questionnaire containing a great deal of detailed information about the boy and parents, obtained in a direct interview with the boy's mother and in some cases with other members of the family.
10. Ratings by the home visitor of the standard of living of the home, the home as a place likely to produce delinquency, and the discipline of the subject.⁴
11. Results of an interview with the boy's teacher. These ratings were prognostications of the boy's development toward a delinquent career.
12. Descriptive Rating Scale filled out by the teacher of each boy. This scale was devised by members of the staff and sought to give information concerning the boy's behavior and personality as seen by the teacher.
13. Trait Record Card. A check list of ninety-three unfavorable characteristics. The teacher was asked to check any of the traits which were characteristic of the boy and to double-check any which were outstanding. The teacher was also asked to write a personality and character sketch of the boy on the back of the card.

⁴ The home visitor's ratings were entirely subjective based upon their own observations.

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14. Ratings by the doctor, the nurse, the home visitor, two psychologists, and any other members of the staff having contact with the boy.
15. A rating of the neighborhood in which the boy lived in terms of its delinquent or non-delinquent character.

The work of collecting the above data was not finally completed until the spring of 1939.

The third step concerned the process called pre-selection. Only 650 boys were needed to make up the total population of the Study - 325 in each of the two groups. As almost three times that number of names had been submitted, a careful and time-consuming process of rejection and selection was necessary. The boys who had, in the interim between referral and collection of data, passed their twelfth birthdays were automatically rejected along with boys who could not be located or who had in the meantime moved out of town. When it appeared that an undue proportion of boys who were not genuinely "pre-delinquent" would get into the treatment group, a pre-selection process was carried out by Dr. P. S. deQ. Cabot in order to eliminate as far as possible the undue proportion of "average" boys. The objective was to try to hold the "average" population to one-third of the total and by including as many of the younger boys, particularly young pre-delinquents, as possible.

Since the plan called for a control and a treatment group which were well matched, it was necessary to know whether or not a boy seemed to be developing in the direction of delinquency or otherwise. Therefore, the boys still remaining in the group after the pre-selec-

tion process were referred to a committee of three experts who were not members of the staff. They were asked to examine all the data available on each of more than 782 cases and to make, independently, a prediction in terms of delinquency probabilities. The Selection Committee considered all 650 treatment and control cases. The present study is concerned with the validation of those predictions and to some extent the factors upon which they were based. The three men who made up the Selection Committee, hereafter called the committee, were carefully chosen from among thirty-seven individuals who were not members of the staff and who had had no part in the gathering of the data or in making the original ratings. All three were men who had special competence and experience in the field of delinquency and crime.

Judge 1 - Director of Case Work at the Massachusetts Reformatory, engaged in social investigations, the preparation of case histories, classification of inmates and supervision of staff workers. Was formerly on staff of the Massachusetts State Prison engaged in prison work.

Judge 2 - Practicing psychiatrist and formerly with the Judge Baker Guidance Center, Boston, was the assistant physician at State Psychopathic Hospital, Ann Arbor, Michigan, assistant superintendent of the Hospital for the Criminally Insane, Ionia, Michigan, and assistant superintendent, Wayne County Training School, Northville, Michigan.

Judge 3 - Head Social Worker, Division of Classification, Massachusetts Department of Correction, including duties as supervisor, teacher and co-ordinator of case work at Massachusetts State Prison, Massachusetts Reformatory and Norfolk Prison Colony. Head worker in a settlement house.

It was the function of the committee to classify each boy after a study of the data in the various sources listed above. It should be

pointed out that the several judges did not interview the boys. One judge, a psychiatrist, stated, "The lack of any psychiatric interview with the subject did lessen tremendously the accuracy of the work. This, in my opinion, is the most valuable prognostic aid there is." The judges expressed their predictions in terms of an 11-point scale which varied from -5 through 0 to +5. (See Figure I - p. 13) A rating of -5 indicated the greatest probability that the boy would develop a "delinquent career"; conversely a rating of +5 expressed the greatest probability of the boy not developing a delinquent career.

The scale was a predictive indicator based on the probabilities of future conduct. As the committee did not know whether a given boy under consideration would become a treatment boy or fall into the control group, the prognostications as to future delinquent behavior were based on the assumption that the boy would not receive special treatment designed to prevent the development of a delinquent career. The committee drew up definitions of the terms "difficult", "average", and "zero" which corresponded to the "minus", "plus" and "zero" ratings respectively.

Judge 1, in defining "difficult", expressed the opinion that the legal definition of delinquency alone was entirely inadequate and that a court appearance was not a necessary criterion of delinquency.

5 "Delinquent career" was defined as a "customary and habitual mode of adjustment" or a "persistent pattern of anti-social behavior".

FIGURE I

THE 11-POINT RATING SCALE AS USED IN CLASSIFICATION AND PREDICTION

BY THREE JUDGES, 1938

	(-5)	"Markedly not difficult", "non-pre-delinquent",
	()	or extreme probability of not developing a
	()	delinquent career.
	(-4)	
"Average"	()	
("plus boys")	(-3)	
	()	Varying degrees of the above
	(-2)	
	()	
	(-1)	
	0	Uncertain or equal probabilities of developing
		toward or away from delinquency.
	(-1)	
	()	
	(-2)	
	()	
"Difficult"	(-3)	Varying degrees of the following
("minus boys")	()	
	(-4)	
	()	"Markedly difficult", or "pre-delinquents", or
	()	extreme probabilities of developing a delinquent
	(-5)	career.

1. Summary

The following is a summary of the results of the experiments conducted on the effect of the concentration of the solution on the rate of reaction.

The rate of reaction was measured by the volume of gas evolved per unit time.

The results are shown in the following table:

The rate of reaction increases with increasing concentration of the solution.

The rate of reaction is directly proportional to the concentration of the solution.

The following graph shows the relationship between the rate of reaction and the concentration of the solution.

Rate of reaction (cm³ gas / min)

Concentration of solution (mol / dm³)

Rate of reaction (cm³ gas / min)

Concentration of solution (mol / dm³)

He believed that a more reliable criterion is the observed disorganization of personality. Judge 2 characterized a "difficult" boy as one, who,

in the face of a normal amount of ~~deterrence~~ gets into difficulty with society - may not actually be delinquent - but owing to lack of personality adjustment he is unable to cope with the average environment. Or he is unable to resist environmental influences persistently and would turn to anti-social conduct as a solution.

He would not claim that delinquency need necessarily be the result of a disorganized personality. The latter may show no trend toward delinquency - "either through the nature of the abnormality itself or due to the fact that such an individual may be living in an environment putting little stress upon the individual". In other words, he believed that delinquency might be the result of difficult environmental influences impinging upon an individual susceptible to such influences. Judge 3 defined the "difficult boy" as "one whose habits, attitudes and behavior give evidence of an incipient or actual anti-social career regardless of open conflict with the law". He believed that a high proportion of disorganized personalities would fall into this group.

The "average" boy was considered by Judge 1 as,

one whose constant traits, values and actions are those by which adjustment can be made to the changing situations and problems of his age level and intolerable social circumstances without personality impairment.

He observed that the preponderance of unfavorable factors do not necessarily indicate a "difficult" boy unless the individual's responses to those factors were known. In other words, if he responded

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to these unfavorable factors without disturbing conduct, he could be considered an "average" boy even though he might be disorganized in his personality. Likewise, Judge 2 believed that the abnormal personality need not necessarily be pre-delinquent. Judge 3 also stressed the matter of conduct as being the essential criterion, i.e., the individual's reaction to his environment. He said that the average boy was "physically, mentally and morally capable of conducting himself in accordance with the generally accepted standards of behavior in the broader community". Thus, the three judges agreed that the essential criterion of the "average" boy was acceptable conduct. The "average" boy was considered at the opposite pole from the "difficult".

The classification of "zero" would logically be assumed to mean that the probabilities of the boy becoming delinquent are equal to the probabilities of his not becoming delinquent and thus a point of uncertainty. This was considered a weak category because frequently the judges placed in this group boys on whom they had incomplete information as well as some who were too young to have developed easily recognized social attitudes outside the home. Fortunately, only 7 per cent of the total 650 matched cases were "zero".

The three judges, working independently, made predictions for each of more than 782 boys. If at least two of the judges had independently given a particular boy the same rating, that rating was taken as the best prediction for that boy. If the independent ratings of no two of the men were the same, the case was discussed until two of the three men agreed on a rating.

After he had made a rating for a case, each judge recorded brief notes of the chief factors upon which his judgments were based. A few samples of these protocols, as given by the raters, follow:

Example A - This boy presented a picture of a serious pre-delinquent. The judges rated him as -3 or -4 with a final rating of -3 which was a high delinquency rating. This boy did turn out to be a serious delinquent with commitments to Lyman School, Shirley School and the Massachusetts Reformatory.

Judge 1 - (-3): Two years retarded at school where in constant disorder and some petty stealing. Some bunking out at night. Older sister delinquent (steals, bunks out). Mother dead and maternal grandmother alcoholic. Very poor neighborhood - congested. Father stubborn, inconsistent in discipline. Subject adventuresome, rover.

Judge 2 - (-4): Subject is excitable - untrained, has faculty of "putting himself across", which is an asset in delinquency. Already is stealing, not vicious but a moral bad example of older sister. Father willful and uncooperative with agencies. Children never had much supervision.

Judge 3 - (-3): Age 10, grade III, the fourth of six children in a home broken by mother's death from T.B. five years ago. Maternal grandmother helps father care for children but teacher says she goes "on bats" for week or so. Father helpless and uncooperative. Bad neighborhood; some of other children have T.B. bones and some infantile paralysis. Subject has low average intelligence but has repeated two grades. Is a very cute youngster and knows how to "play up" to people and is a terror when not watched. Is a chronic runaway and a notorious thief.

Example B - This boy presents the appearance of a non-pre-delinquent. He turned out to be markedly free of any delinquent activity.

Judge 1 - (+3): An excellent student, well-behaved and conscientious. At home is somewhat fretful when

his desires are crossed. No indications of difficulty. Family comfortably situated economically, have high ambitions for children. Father active politically. No criminality or S.S.I. Superior performance on S.A.

Judge 2 - (+2): Dependable, popular, capable, good poise. But perhaps somewhat spoiled at home though survives it well. Good standards in family. Father good pattern. (Father traffic offenses only.) Mother ambitious, concern and planful regime.

Judge 3 - (+2): Age 10, the youngest of four children of superior Italian parents. Father owns insurance business. Not known to S.S.I. Father has series of minor traffic violations and is said to be a "pol". Fair section. Subject has average intelligence and superior achievement and teachers give fine ratings. Somewhat spoiled by mother and shows tantrums but no anti-social conduct. Mother pictures all home affairs and children with rose-colored glasses.

Example C - This boy presented the appearance of a pre-delinquent but he did not become delinquent. He was rated by -2 by all three judges.

Judge 1 - (-2): Subject retarded at school (when placed beyond test achievement - test level even now) and obviously disinterested in making a "go" of it. His close friend is a boy two years retarded and something similar (or worse) school problem. Subject was well liked by boys, and is active with gang who engage in small thefts. Subject an assertive personality, disobedient at school. Neglected physically. Unfavorably compared to older brother - "a model boy". Economic stress of family relieved by mother's work outside. Neighborhood fairly good, but harbors gang of boys who have engaged in some minor group stealing. Role of father uncertain.

Judge 2 - (-2): Has sense of inferiority (reading difficulty), wants to compensate by being "tough guy"; gang influences; very gregarious and assertive. Family good standards, keep track of boy and aware of problems. Apparently adequate discipline at home.

Judge 3 - (-2): Subject is third of four children of apparently interested, congenial and competent parents.

No economic dependency, although not well off. Subject is a problem to mother because of enuresis, slowness in school and teacher says Subject is sly, slovenly, disobedient, and deceitful. Apparently has been in petty thefts with gang under an older sophisticated leader.

From statements made by the judges themselves there is no question but that the judgments were impressionistic and clinical in nature based on the study of all the data which were presented to them. The judges did not use any mathematical computation or statistical manipulation of weighted variables. Unquestionably, in such a clinical approach there would be informal weightings of an intuitive and intangible nature based upon the individual judge's past experience. The protocols, a few examples of which were given above, only represent the conscious and articulated criteria of the several judges.

It is obvious that any validation of the prognostications would have to be based on these protocols since they are the only record of the factors which we have upon which the judges based their predictions. These protocols, then, will be considered in more detail later.

CHAPTER III

EVENTUATION OF THE SELECTION COMMITTEE PREDICTIONS

The writer and Mr. Edwin Powers, Executive Secretary of the CSYS, collaborated in determining how the population would be sampled, in drawing up the scale upon which evaluations could be made, and in making the final ratings, as will be described later. Hereafter, these two men will be referred to as the raters, for the sake of convenience.

Since this study was planned as a preliminary investigation on a validation of the committee's predictions in order to determine if there was anything of sufficient significance to warrant the time and expense of conducting a more detailed study, it was desired to obtain a sample of the entire population of the 650 control and treatment boys for whom predictions were made.

It was agreed, between the raters, that only those boys who had reached the age of seventeen and one-half would be included in the sample. The selection of cases on this age basis depended upon the following factors. In the first place, the committee had made its predictions over a projected ten-year period which is obviously a risk that few would care to take. It is clear, however, that only the oldest CSYS boys would meet this qualification or approximate it. In addition, it can be more readily determined whether the older boy has or has not developed a delinquent career since he has had ample time, in most cases, for his patterns of behavior to become established in one direction or the other. Secondly, all boys were being routinely cleared

through the Board of Probation upon reaching the age of seventeen and one-half and it was believed desirable to have this information.

The sampling was also determined to some extent by the amount of information pertinent to the problem of delinquency. All of the 325 treatment boys did not continue in the program to its end in December 1945 for a number of practical reasons. Largely, because of the shortage of staff during the war years, it was necessary to drop substantial numbers of boys. The CSYS did not have as much information on the delinquencies of these closed cases and it was sometimes necessary to reject the boy of seventeen and one-half in this group because there was not sufficient information related to his delinquencies to classify him.

Another, and most important factor, was that the committee had made their predictions on the assumption that the boys would not receive systematic treatment directed at the prevention of delinquency. It is obvious, therefore, that the control group would make the best study in this regard since it is reasonably safe to assume that the controls did not receive the long-time, systematic treatment that was afforded the CSYS treatment group. Conversely, the latter group might be open to question in validating the original committee's predictions since, of course, one of the principal objectives of the CSYS was the prevention of delinquency. It was decided, however, to include fifty treatment cases in the total sample of one hundred since validation of the prognostications of this group compared with fifty controls

might have some implications for the evaluation of the CSYS treatment program. For example, if those treatment boys who were predicted as pre-delinquent did in fact develop delinquent careers, it would mean that the treatment was unsuccessful and the prediction valid. Also, if those boys who were rated as unlikely to become delinquent did develop delinquent careers, it would mean that the prediction was invalid and the treatment inadequate. It would be expected that a comparison of the fifty treatment with the fifty controls would find many more controls delinquent if the treatment program had been successful in preventing delinquency among the treatment boys.

A practical reason for including the treatment cases in this sample was that the CSYS had a great deal of detailed information concerning them; whereas, it had less information on fewer boys in the control group. While this particular study was in progress, a field worker was gathering data on the control group and these cases were used in the sample as adequate information became available.

One of the most important determinants of the sample was the method by which the cases were classified or rated as to the extent of the development of delinquent careers. The raters independently, and without any discussion whatever, classified each case and later compared their findings. If they had disagreed as to the extent a given boy had or had not developed a delinquent career, they rejected that boy from the study. It was obvious that through this process an unknown number of cases would have to be rejected. Since the

total number of boys who had reached the age of seventeen and one-half were limited, and since some of the other criteria would also tend to eliminate an unknown number of cases, there was no alternative but to select cases alphabetically, beginning with A and working through the alphabet until fifty treatment and fifty control cases had finally been obtained.

To summarize: The raters agreed, therefore, to select alphabetically only those boys who had reached the age of seventeen and one-half and on whom they perfectly agreed through independent study and who had fallen within a particular grouping on the scale.

The raters, having decided upon the method of selection, were next faced with the problem of developing a workable instrument on which to rate the extent to which a given boy had or had not developed a delinquent career. Since the 11-point scale (See Figure I - p. 13) had already been used by the Selection Committee in their predictions, it was believed that it could also be adapted for use in determining the outcome of the predictions. Obviously, an important consideration was that it would yield comparable ratings which could be conveniently compared to the predictions.

Since it was preferable to use the 11-point scale in some fashion, in order to have comparable ratings, the raters agreed to break up the 11-point scale into what, for all practical purposes, was a 5-point scale. Figure II shows how this was done. (See Figure II - p. 23)

A glance at Figure II will show that there are three scale points within Group I and Group V respectively. The committee, in its pre-

FIGURE II

THE 11-POINT RATING SCALE REDUCED TO A 5-POINT SCALE

- 5)
- 4) Group I Serious delinquents
- 3) "Delinquent Careers"

- 2)
- 1) Group II Minor delinquents

- 0) Group III Doubtful

- +1)
- +2) Group IV Non-delinquents

- +3)
- +4) Group V Markedly non-delinquents
- +5)

THEORY

Let $f(x)$ be a function of x and let a be a constant.

$$\frac{d}{dx} f(ax) = f'(ax) \cdot a$$

$$\frac{d}{dx} f(ax+b) = f'(ax+b) \cdot a$$

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$$\frac{d}{dx} f(ax+b) = f'(ax+b) \cdot a$$

dictions, very rarely used -5 or +5 so that the extremes of the scale, for all practical purposes, were -4 and +4. It was for this reason that the raters felt justified in grouping them in this manner. It was necessary to define what was meant by the various groupings in a more practical form. This was done, as follows:

Group I - (-3, -4, -5)

These boys have shown a "persistent pattern of anti-social behavior" expressed by a disregard or defiance of authority. Their delinquent acts, official and unofficial, have been, as a rule, frequent and serious although in some cases their delinquency may be expressed by a long series of minor infractions or by only one or two serious offenses.

Usually these boys are well known to law-enforcing agencies and are, or have been, on probation and usually have been committed to a correctional school. However, it may be possible that they are not known to law-enforcing agencies although they may have committed frequent and/or serious delinquent acts for which they could be adjudged delinquent. They are characterized by persistent delinquent activity in spite of ordinary deterrents. They have little or no respect for law and order, resist authority, and among them are found the "cop haters". This group would also include those boys who are frequently drawn into trouble although their general intent is "to go straight".

Group II - (-1, -2)

These boys have not shown a "persistent pattern of anti-social behavior" but they have shown a disregard for authority though not so

frequently as those in Group I. They are somewhat unscrupulous and will violate the law (for gain) but are more inclined to inhibit their impulses than those in Group I.

They may be known to the police and court for minor offenses. They may have been, or are, on probation or may have had a commitment to a training school. Technical violations may be frequent and willfully committed. Their minor offenses are only occasional. In attitude they resent authority in some degree but do not carry their resentment to the extreme of those in Group I.

Group III - (0)

These boys have not been consistent in their attitudes or behavior. At times they have been defiant; at other times they have been quite law abiding. Their record is not entirely clear of misbehavior. Their offenses, which occur infrequently, are confined to petty thefts. They may also be troublesome in school through misbehavior and truanting but these are not frequent or serious.

There are equal probabilities that they will be a plus or a minus. Psychologically they are somewhat anti-social but seldom carry their impulses into action except for technical violations which may be relatively frequent. They may be known to the court or police for minor violations which are infrequent and not serious.

Group IV - (+1, +2)

Although these boys may have at times been careless or reckless in their associations and may have, therefore, been involved rarely in

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some minor delinquency, they seem to have a fairly wholesome attitude toward the law and are not considered real delinquents by the authorities. They may have committed a few less serious delinquent acts or they may have committed one or two more serious acts for which they are repentant and for which they are not wholly to blame. On the whole, these boys are law abiding and have respect for the law.

Usually, however, they would not be known to the police or courts except perhaps for some technical violations.

Group V - (+3, +4, +5)

There is no doubt of the sincerity of these boys who are well socialized and definitely respect duly constituted authority. It is possible that they may have committed some delinquent act or acts but if so, such acts were not typical of them and are rare and not serious. Usually they are not known to the police or courts except perhaps for technical violations which are allowable under this category, provided they are uncommon or rare. Ordinarily even these would not be of willful intent. These boys are definitely on the side of law and order and seem to belong to that group of potentially good, solid citizens.

It was constantly borne in mind that when the Selection Committee referred to delinquency that they were considering a delinquent career or a "persistent pattern of anti-social behavior". Group I, on the above scale, represents the delinquent careerist. Three factors were considered constantly while this scale was being devised. These were: (1) the frequency of offenses; (2) the seriousness of offenses; and

(3) the attitude of the boy toward authority and regarding his offenses.

The next step was the long process of rating the boys based upon material obtained from several sources. Voluminous records had been kept on the treatment boys since 1939. In addition, all of the boys, whether control or treatment, had been cleared through the Board of Probation and the local Crime Prevention Bureau which deals only with delinquents; all boys, whether control or treatment, had been cleared¹ through Lyman School, Shirley School and the Massachusetts Reformatory, and in the cases of those boys who were committed, abstracts were made of these official records. In addition to this, one of the raters knew personally the majority of the treatment boys while the other rater knew a substantial number. One of the raters had had a personal interview with all of the control boys.

The raters independently and very carefully analyzed all the available data and then made their independent judgments as to the extent an individual boy did or did not become delinquent. After the two men had rated a group of boys, they met for the purpose of comparing their ratings. If the ratings did not perfectly agree, those cases were rejected. This process continued until the raters had obtained one hundred boys - fifty treatment boys and fifty control boys on whom they perfectly agreed.

¹ Lyman School for Boys and the Industrial School for Boys located at Shirley, Massachusetts are the two State correctional schools in Massachusetts for delinquent boys. Lyman School for Boys is for boys under fifteen years of age. Shirley School is for delinquent boys between the ages of fifteen and seventeen.

As Table I (p. 29) indicates, the records of eighty-six of the treatment boys were analyzed and independent ratings made on each boy in order to find fifty cases on whom the raters perfectly agreed. This represented 58.14 per cent. In the case of the controls it was necessary to read and then analyze only seventy-three cases to obtain fifty boys. The rate of agreement for the control group was somewhat higher - 68.49 per cent. This may be accounted for, in part, by the great mass of information found in the treatment records which contain anywhere from fifty to one hundred pages, as contrasted with the control group which averaged five pages per record. It seemed that the greater the amount of material in the records, the more difficult it was to make a rating upon which the respective raters could agree.

Thus, out of this analysis and rating process there emerged one hundred boys; fifty controls and fifty treatment with ratings of the degree to which they had or had not become delinquent which could be compared with the Selection Committee prognostications.

Table II (p. 30) shows the comparison between the predictions of 1938 and the eventuation of those predictions for fifty treatment boys in 1947. It should be borne in mind that all of the boys in this study were seventeen and one-half years of age or older when their delinquency status was determined. It should also be remembered that the predictions were made in 1938 and the outcome of the predictions was determined in 1947. Approximately nine years had elapsed from the date of predictions to the measurement of the outcome. The diagonal

TABLE I

EXTENT OF AGREEMENT OF TWO INDEPENDENT RATERS ON THE 5-POINT
DELINQUENCY SCALE FOR 159 TREATMENT AND CONTROL
BOYS OF THE CSYS

Difference In Rating	Treatment		Control		Both Groups	
	No.	Per cent	No.	Per cent	No.	Per cent
None	50	58.14	50	68.49	100	62.89
1	25	29.07	18	24.66	43	27.04
2	9	10.47	4	5.48	13	8.18
3	2	2.32	1	1.37	3	1.89
Total	86	100.00	73	100.00	159	100.00

TABLE 1
 SUMMARY OF THE DATA FOR THE FIRST TWO YEARS OF THE
 SURVEY OF THE BAY OF FUNDY, 1954-55

STATION	DATE	TEMPERATURE (°C)				WIND DIRECTION
		AIR	WATER	WIND	WAVE	
10-1	10/1	15.0	12.0	10	10	SW
10-2	10/2	14.0	11.0	15	15	SW
10-3	10/3	13.0	10.0	20	20	SW
10-4	10/4	12.0	9.0	25	25	SW
10-5	10/5	11.0	8.0	30	30	SW
10-6	10/6	10.0	7.0	35	35	SW
10-7	10/7	9.0	6.0	40	40	SW
10-8	10/8	8.0	5.0	45	45	SW
10-9	10/9	7.0	4.0	50	50	SW
10-10	10/10	6.0	3.0	55	55	SW

TABLE II

THE SELECTION COMMITTEE PREDICTIONS OF 1938 COMPARED WITH
THE DELINQUENCY STATUS AT AGE SEVENTEEN AND ONE-HALF
FOR FIFTY TREATMENT BOYS OF CSYS

Selection Committee Predictions on 5-point Scale	Delinquency Status on 5-point Scale at Age 17 $\frac{1}{2}$					
	I	II	III	IV	V	Total
I	2			1	3	6
II	2	2		5	13	22
III			2		1	3
IV			1	2	15	18
V					1	1
Total	4	2	3	8	33	50

Table 1

The following table shows the results of the experiments conducted on the effect of the concentration of the solution on the rate of reaction. The concentration of the solution is expressed in moles per liter (M) and the rate of reaction is expressed in moles per liter per second (M/s).

Concentration of Solution (M)	Rate of Reaction (M/s)
0.1	0.01
0.2	0.02
0.3	0.03
0.4	0.04
0.5	0.05
0.6	0.06
0.7	0.07
0.8	0.08
0.9	0.09
1.0	0.10

line in Table II represents perfect prediction and it is immediately apparent that nine boys, or 18 per cent, eventuated as predicted, three boys, or 6 per cent, turned out worse than predicted, and thirty-eight boys, or 76 per cent turned out better than predicted.

Table III (p. 32) presents a somewhat similar picture of the fifty control boys. An examination of Table III will show that 10 per cent, or five boys, eventuated as predicted. Six boys, or 12 per cent turned out worse than predicted, and thirty-nine boys, or 78 per cent turned out better than predicted.

Table IV (p. 33) is a combination of Table II and Table III. Table IV shows that of the total of one hundred boys 14 per cent turned out as predicted, 9 per cent turned out worse than predicted, and 77 per cent turned out better than predicted.

The above analysis gives only a partial picture of the accuracy of the predictions. If we differentiate only between delinquent (Group I and II), doubtful (Group III), and non-delinquent (Group IV and V), we obtain a more complete picture of the outcome of the prediction for the total group of one hundred treatment and control boys as Table V (p. 34) will show.

An examination of Table V presents several interesting facts. It can be seen that twenty-eight boys in each of the treatment and control groups were predicted to become delinquent. Six of these twenty-eight treatment boys predicted to become delinquent actually did become delinquent, representing 21.42 per cent, while twenty-two, or 78.57 per cent, turned out non-delinquent. However, of the twenty-eight boys

TABLE III

THE SELECTION COMMITTEE PREDICTIONS OF 1938 COMPARED WITH
THE DELINQUENCY STATUS AT AGE SEVENTEEN AND ONE-HALF
FOR FIFTY CONTROL BOYS OF CSYS

Selection Committee Predictions on 5-point Scale	Delinquency Status on 5-point Scale at Age 17 $\frac{1}{2}$					Total
	I	II	III	IV	V	
I	2			2	1	5
II	5	2		4	12	23
III	1				1	2
IV					19	19
V					1	1
Total	8	2		6	34	50

TABLE IV

THE SELECTION COMMITTEE PREDICTIONS OF 1938 COMPARED WITH
THE DELINQUENCY STATUS AT AGE SEVENTEEN AND ONE-HALF
FOR 100 TREATMENT AND CONTROL BOYS OF CSYS

Selection Committee Predictions on 5-point Scale	Delinquency Status on 5-point Scale at Age 17½					Total
	I	II	III	IV	V	
I	4			3	4	11
II	7	4		9	25	45
III	1		2		2	5
IV			1	2	34	37
V					2	2
Total	12	4	3	14	67	100

Figure 1

The following table shows the results of the analysis of variance for the data in Figure 1. The results are given in terms of the sum of squares, degrees of freedom, and the F-value.

Analysis of Variance					
Source	Sum of Squares	D.F.	F	Mean Square	Significance
Between Groups	10.00	4	1.00	2.50	0.40
Within Groups	10.00	16	0.62	0.62	0.60
Total	20.00	20			

TABLE V

SELECTION COMMITTEE PREDICTIONS OF 1938 COMPARED WITH DELINQUENCY STATUS AT AGE SEVENTEEN AND ONE-HALF FOR 100 TREATMENT AND CONTROL BOYS OF CSYS ON A BASIS OF DELINQUENT, DOUBTFUL AND NON-DELINQUENT

Selection Committee Predictions as to Delinquency Status	Delinquency Status at Age 17½									
	Delinquent (I, II)			Doubtful (III)			Non-delinquent (IV, V)			Total
	T	C	T&C	T	C	T&C	T	C	T&C	
Delinquent (I, II)	6	9	15				22	19	41	56
Doubtful (III)		1	1	2		2	1	1	2	5
Non-delinquent (IV, V)				1		1	18	20	38	39
Total	6	10	16	3		3	41	40	81	100

1. The following table shows the results of the tests made on the various samples of the material, and the results of the tests made on the material as received from the manufacturer.

No.	Tests made on material as received from manufacturer				Remarks
	1	2	3	4	
1	10	10	10	10	(1) 10
2	10	10	10	10	(2) 10
3	10	10	10	10	(3) 10
4	10	10	10	10	(4) 10
5	10	10	10	10	(5) 10
6	10	10	10	10	(6) 10
7	10	10	10	10	(7) 10
8	10	10	10	10	(8) 10
9	10	10	10	10	(9) 10
10	10	10	10	10	(10) 10

in the control group who were predicted to become delinquent, nine, or 32.14 per cent did become delinquent and nineteen, or 67.85 per cent, did not become delinquent. This represents a slightly more favorable outcome for the treatment group as compared to the control group. However, since the difference seems to be so slight between the outcome of the predictions for the treatment and control groups, it was believed that the two could be handled as one group for the purpose of this study.

Referring again to Table V, it may be seen that the diagonal line represents perfect prediction. It shows that fifty-five boys of a total group of one hundred turned out as they were predicted. From Table V it may be seen that of thirty-nine boys predicted to become non-delinquent, thirty-eight did turn out to be non-delinquent, while one of them was doubtful; i.e., there was a serious question as to whether he would fall on the delinquent or on the non-delinquent side of the scale. He was, therefore, rated doubtful. For the group of boys predicted to be non-delinquent the eventuation was almost perfect and indicates that a non-pre-delinquent can be more readily identified and that he rarely, if ever, developed delinquent patterns.

A comparison between Table IV and Table V shows that it is much more difficult to predict delinquency on the finer scale, as exemplified by Table IV which is no more than would be expected.

Referring to Table V again, it can be seen that out of fifty-six boys who were predicted to become delinquent to varying degrees, only fifteen, or 26.78 per cent actually developed delinquent careers. The

remaining boys, forty-one, or 73.21 per cent, of this group of fifty-six turned out to be non-delinquent. This, then is the discrepancy group and one which warrants further study.

The question arises as to whether there were any differences between this discrepancy group and the fifteen boys who did develop delinquent careers. How did the boys who were predicted to be non-delinquent and turned out non-delinquent compare with either of these first two groups in terms of the information obtained from the protocols? Certainly, it would be anticipated that those who were predicted to become delinquent would be similar in many respects, from the standpoint of environmental pressures and personality make-up. It would also be expected that the non-delinquent group, i.e., predicted to be non-delinquent and turned out non-delinquent, would enjoy many more favorable personality traits and fewer undesirable environmental influences, as determined from the Selection Committee's protocols.

For the sake of convenience, the fifteen boys who were predicted to become delinquent and did become delinquent will be designated Class A. The boys who were predicted to become delinquent and did not become delinquent will be designated Class B. The boys who were predicted to be non-delinquent and eventuated non-delinquent will be called Class C.

The basic question, therefore, is concerned with whether or not there were any factors or constellation of factors which would differentiate all three classes but particularly Class A from Class B in terms of the variables which the judges had recorded on their protocols.

Throughout the remainder of this study the principal consideration will be given to these two classes and Class C will only be referred to occasionally.

A validation of the committee's predictions might be done in one of two ways, or both. First, one could do a simple content analysis of the various items such as neighborhood, intelligence, etc., which were mentioned favorably or unfavorably and which each judge recorded as being the most important factors upon which the prediction was based. Secondly, one could also examine the protocols from a case study or clinical point of view. This latter approach would show a certain configuration or constellation of factors and their relationships to each other which would not appear in the content analysis. In this connection, it is well to bear in mind that the Selection Committee did not use the statistical method in its predictions, as has already been mentioned. It was decided in this validation of the Selection Committee's predictions, that both the simple content analysis and a case study analysis would be combined. While a systematic analysis of items in the protocols will enable one to arrive at a list of variables which could be assessed for all three groups, it is clear that an examination of the protocols in their totality and in the light of case histories of the boys is also necessary. The content analysis and the case study analysis will be considered in that order. It will be recalled that the group of boys who were predicted to become delinquent and who did not (Class B) is the discrepancy group, i.e., it is the group that the

Selection Committee failed to predict accurately. It is important, then, to compare Class B with the fifteen boys in Class A who developed delinquent careers in order to determine whether there are any factors discriminating between them as judged by an examination of the committee's protocols.

Of the fifteen boys in Class A, the real delinquents, eleven of them were placed in Group II on the delinquency scale (see Figure II - p. 23) and description of categories of delinquent careers (pp. 24-26). Four of these fifteen boys were placed in Group I in terms of the committee's predictions. The delinquency status at age seventeen and one-half for the fifteen boys in Class A was eleven boys in Group I, or markedly delinquent, and four boys in Group II.

Fifteen boys were selected from Class B (the group of forty-one boys who were predicted to become delinquent and who did not) on the basis of the lowest predictive rating and the highest non-delinquency status at seventeen and one-half since it was believed that the greatest extreme between prediction and delinquency outcome would be more valid in this selection. Class B was selected from the control group only since treatment obviously could not have been a factor in their turning out to be non-delinquent. Of these fifteen boys, two were predicted to become markedly delinquent (Group I) and thirteen fell into Group II. The delinquency status at age seventeen and one-half for these fifteen boys was five in Group IV and ten in Group V.

The writer examined the protocols for each boy to obtain all the

items which were mentioned by any one of the three judges as being favorable or unfavorable. The judges were numbered 1, 2 and 3 so that they could be identified later if necessary. If Judge 1 mentioned intelligence as a favorable factor in a particular instance, the number "1" was placed in the appropriate square on the master work sheet and similarly with the other two judges. The writer had to determine for himself whether any given item was considered by a judge to be favorable or unfavorable. If no decision could be made, the item was not used. The judgment as to whether any given item was considered by the judge to be favorable or unfavorable depended upon how it was used in the context. Certain personality traits were difficult to evaluate; particularly such traits as "timid", "fears", "shy", "withdrawn", etc. It could only be assumed that when a judge gave a boy a low rating, these factors were considered unfavorable. Judge 3 frequently and routinely mentioned chronological age, school placement, nativity of parents and a few other items but did not state whether he considered them favorable or unfavorable. These, of course, were not used in this study.

The writer noted every item upon the work sheet, at least those on which he could come to a decision as to whether they were considered favorable or unfavorable, and noted in appropriate columns whether Judge 1, 2, or 3 considered them favorable or unfavorable. The result was a list of almost two hundred items or variables. It was necessary to reduce the variables because it would have been too time-consuming to use them all and such a large number of variables associated with such a small sample of boys became meaningless as a means of differen-

tiating one group from the other.

Although there are a number of methods of reducing variables,² the writer selected the simplest method and the most obvious, which is to study them from the common-sense point of view and decide which variables would naturally go together. "Strictly speaking, of course, grouping does not reduce the number of variables but only the number of prediction coefficients to be computed."³ The reduction of the variables, of course, did not take place until after the analysis of the protocols for each boy had been completed. The final list of twenty-two variables may be seen in Appendix A with some of the more important items which were considered in a given variable.

The number of times the judges mentioned a particular variable, whether favorably or unfavorably, represents the number of occurrences of such judgments for that particular variable. The same applied for all twenty-two variables. The total number of occurrences represent the total number of times all three judges mentioned all variables, whether favorably or unfavorably, for the total group of forty-five boys.

The twenty-two most frequently mentioned variables are listed in Table VI (p. 41) in order of the frequency of their appearance. The frequency of the appearance of the variables is expressed in terms of

2 Paul Horst, The Prediction of Personal Adjustment, (New York: Social Science Research Council, 1941), p. 64-68.

3 Ibid., p. 64.

The first of these is the fact that the
 government has been unable to secure
 the necessary funds to carry out its
 policy of maintaining the value of the
 pound. This has led to a steady
 decline in the value of the pound
 since 1945. The second is the fact
 that the government has been unable
 to secure the necessary funds to
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 the value of the pound. This has
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 The fourth is the fact that the
 government has been unable to secure
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 the pound. This has led to a steady
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 that the government has been unable
 to secure the necessary funds to
 carry out its policy of maintaining
 the value of the pound. This has
 led to a steady decline in the value
 of the pound since 1945.

TABLE VI

THE VARIABLES LISTED MOST FREQUENTLY FOR CLASSES A, B and C
(The frequency of appearance of each variable as a percentage of all items in protocols for all forty-five cases - F= Favorable; U = Unfavorable)

Variables		Occurrence in All Judges' Protocols				
		F&U	A, B&C	A	B	C
1. Neighborhood	F	8.89	1.48	.11	.91	.45
	U		7.41	2.73	2.28	2.39
2. Intelligence	F	8.44	4.68	1.48	.68	2.50
	U		3.76	1.48	1.53	.34
3. Personality Traits	F	7.07	.68			.68
	U		6.39	2.73	1.59	2.05
4. School Retardation	F	6.84	1.25	.34	.45	.45
	U		5.59	1.82	2.85	.91
5. Parental Supervision	F	6.16	1.48	.11	.22	1.14
	U		4.68	2.16	2.39	.11
6. Delinquency Status	F	6.16	.80			.79
	U		5.36	2.62	2.73	
7. Parental Social Adjustment	F	5.59	1.60		.22	1.36
	U		3.99	2.05	1.48	.45
8. Mothers' Attitudes	F	5.02	1.71			1.71
	U		3.31	2.28	.22	.79
9. Behavior at School	F	4.68	2.39	.57	.22	1.59
	U		2.28	1.25	1.02	
10. Fathers' Attitudes	F	4.56	1.37			1.36
	U		3.19	2.05	.57	.57
11. Family Delinquency	F	4.33	3.08	1.14	.45	1.48
	U		1.25	1.02	.22	
12. Home Broken	F	4.10	.11	.11		
	U		3.99	1.82	1.71	.45
13. Economic Status	F	3.99	.91	.11	.57	.22
	U		3.08	1.36	.79	.91
14. Attitude toward Authority	F	3.31	.46			.45
	U		2.85	1.48	1.14	.22
15. Home Adequate	F	3.08	1.94	.91	.45	.57
	U		1.14	.57	.34	.22
16. Fathers' Personality	F	3.08	.57		.11	.45
	U		2.51	.91	1.25	1.48
17. Health	F	3.08	.11			.11
	U		2.96	.91	1.14	.91
18. Mothers' Personality	F	2.96	.46		.11	.34
	U		2.51	.45	1.48	.57
19. Status Siblings	F	2.96	.46			.45
	U		2.51	.91	1.25	.34
20. Behavior with Others	F	2.85				
	U		2.85	1.48	1.14	.22
21. Behavior at Home	F	1.94	1.48	.45	.11	.91
	U		.46	.22	.22	
22. Heredity	F	.91				
	U		.91	.34	.57	

Report of the Commission on the Administration of the
 Government of the State of New York, 1904-1905
 (Continued from page 1)

Summary of the Commission's Findings				
Item	Amount	Amount	Amount	Amount
1. Salaries of the Commission	\$10,000.00			
2. Salaries of the Secretary	5,000.00			
3. Salaries of the Clerks	10,000.00			
4. Salaries of the Messengers	5,000.00			
5. Salaries of the Janitors	5,000.00			
6. Salaries of the Watchmen	5,000.00			
7. Salaries of the Drivers	5,000.00			
8. Salaries of the Stenographers	5,000.00			
9. Salaries of the Typewriters	5,000.00			
10. Salaries of the Bookkeepers	5,000.00			
11. Salaries of the Clerks	5,000.00			
12. Salaries of the Messengers	5,000.00			
13. Salaries of the Janitors	5,000.00			
14. Salaries of the Watchmen	5,000.00			
15. Salaries of the Drivers	5,000.00			
16. Salaries of the Stenographers	5,000.00			
17. Salaries of the Typewriters	5,000.00			
18. Salaries of the Bookkeepers	5,000.00			
19. Salaries of the Clerks	5,000.00			
20. Salaries of the Messengers	5,000.00			
21. Salaries of the Janitors	5,000.00			
22. Salaries of the Watchmen	5,000.00			
23. Salaries of the Drivers	5,000.00			
24. Salaries of the Stenographers	5,000.00			
25. Salaries of the Typewriters	5,000.00			
26. Salaries of the Bookkeepers	5,000.00			
27. Salaries of the Clerks	5,000.00			
28. Salaries of the Messengers	5,000.00			
29. Salaries of the Janitors	5,000.00			
30. Salaries of the Watchmen	5,000.00			
31. Salaries of the Drivers	5,000.00			
32. Salaries of the Stenographers	5,000.00			
33. Salaries of the Typewriters	5,000.00			
34. Salaries of the Bookkeepers	5,000.00			
35. Salaries of the Clerks	5,000.00			
36. Salaries of the Messengers	5,000.00			
37. Salaries of the Janitors	5,000.00			
38. Salaries of the Watchmen	5,000.00			
39. Salaries of the Drivers	5,000.00			
40. Salaries of the Stenographers	5,000.00			
41. Salaries of the Typewriters	5,000.00			
42. Salaries of the Bookkeepers	5,000.00			
43. Salaries of the Clerks	5,000.00			
44. Salaries of the Messengers	5,000.00			
45. Salaries of the Janitors	5,000.00			
46. Salaries of the Watchmen	5,000.00			
47. Salaries of the Drivers	5,000.00			
48. Salaries of the Stenographers	5,000.00			
49. Salaries of the Typewriters	5,000.00			
50. Salaries of the Bookkeepers	5,000.00			
51. Salaries of the Clerks	5,000.00			
52. Salaries of the Messengers	5,000.00			
53. Salaries of the Janitors	5,000.00			
54. Salaries of the Watchmen	5,000.00			
55. Salaries of the Drivers	5,000.00			
56. Salaries of the Stenographers	5,000.00			
57. Salaries of the Typewriters	5,000.00			
58. Salaries of the Bookkeepers	5,000.00			
59. Salaries of the Clerks	5,000.00			
60. Salaries of the Messengers	5,000.00			
61. Salaries of the Janitors	5,000.00			
62. Salaries of the Watchmen	5,000.00			
63. Salaries of the Drivers	5,000.00			
64. Salaries of the Stenographers	5,000.00			
65. Salaries of the Typewriters	5,000.00			
66. Salaries of the Bookkeepers	5,000.00			
67. Salaries of the Clerks	5,000.00			
68. Salaries of the Messengers	5,000.00			
69. Salaries of the Janitors	5,000.00			
70. Salaries of the Watchmen	5,000.00			
71. Salaries of the Drivers	5,000.00			
72. Salaries of the Stenographers	5,000.00			
73. Salaries of the Typewriters	5,000.00			
74. Salaries of the Bookkeepers	5,000.00			
75. Salaries of the Clerks	5,000.00			
76. Salaries of the Messengers	5,000.00			
77. Salaries of the Janitors	5,000.00			
78. Salaries of the Watchmen	5,000.00			
79. Salaries of the Drivers	5,000.00			
80. Salaries of the Stenographers	5,000.00			
81. Salaries of the Typewriters	5,000.00			
82. Salaries of the Bookkeepers	5,000.00			
83. Salaries of the Clerks	5,000.00			
84. Salaries of the Messengers	5,000.00			
85. Salaries of the Janitors	5,000.00			
86. Salaries of the Watchmen	5,000.00			
87. Salaries of the Drivers	5,000.00			
88. Salaries of the Stenographers	5,000.00			
89. Salaries of the Typewriters	5,000.00			
90. Salaries of the Bookkeepers	5,000.00			
91. Salaries of the Clerks	5,000.00			
92. Salaries of the Messengers	5,000.00			
93. Salaries of the Janitors	5,000.00			
94. Salaries of the Watchmen	5,000.00			
95. Salaries of the Drivers	5,000.00			
96. Salaries of the Stenographers	5,000.00			
97. Salaries of the Typewriters	5,000.00			
98. Salaries of the Bookkeepers	5,000.00			
99. Salaries of the Clerks	5,000.00			
100. Salaries of the Messengers	5,000.00			

the number of times the variable was mentioned either favorably or unfavorably. The frequency of mention of the variables is expressed as the percentage of the total number of occurrences of all the variables for all the forty-five boys. All the percentage figures seen in Table VI are in terms of the total number of occurrences whether favorable or unfavorable for all twenty-two variables.

The variable which the three judges mentioned more frequently than any other was the Neighborhood. This variable referred to the quality of the neighborhood in terms of whether or not it is conducive to the development of delinquent careers. The second most frequently mentioned variable was Intelligence, and third, Personality Traits. It might be assumed that the three most frequently mentioned variables in this study, Neighborhood, Intelligence, and Personality Traits were the most important ones to the judges in making their predictions, as in
⁴
 Taylor's study.

An examination of Table VI shows that a number of the variables were discriminating and some were non-discriminating. In Table VI, the letter "F" refers to favorable mention of an item and "U" to unfavorable mention. Column one represents the number of times, expressed in percentages, that all the judges mentioned a variable favorably and unfavorably. Column two refers to the percentage of times that all three judges mentioned a variable as favorable or unfavorable. Column three

4 Donald W. Taylor, "An Analysis of Predictions of Delinquency Based on Case Studies," The Journal of Abnormal and Social Psychology, 42:46-56, January, 1947.

the first of these is the fact that the
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refers to the frequency of mention of the variables as favorable or unfavorable for Class A; columns four and five likewise refer in percentages to the number of times the variables were mentioned either favorably or unfavorably for each of these two classes.

It must be constantly borne in mind that these variables were only those which were mentioned in the judges' protocols as being favorable or unfavorable. In the great mass of data which were available to the judges there may well be other variables which might be more discriminating. This study is only concerned with what the judges considered to be most important in making their predictions and which they recorded.

A careful analysis of Table VI will show that all the favorable comments discriminated Class A from Class C, which might be expected. In this study if a variable is discriminating, favorable comment is predominantly associated with Class C and unfavorable comments with Class A. Likewise, between Class A and Class B, unfavorable comments of a variable would be more frequent with Class A.

Variable number 7 (Parental Social Adjustment) discriminates markedly between Class A and Class C. Class A had no favorable mention of Parental Social Adjustment, whereas Class C was significantly high in comparison. So far as the favorable mention was concerned, Behavior with Others was not a discriminating factor between these two classes since it was not mentioned favorably at all. As a matter of fact, unfavorable comments were much more frequently mentioned by all judges

than were favorable items. For this reason, it is believed that the unfavorable mention of the several variables is of more significance to this study and will, therefore, be given the most attention.

Again, an analysis of Table VI will show that unfavorable comment discriminated between Class A and Class C with three variables - Fathers' Personality, Health, and Mothers' Personality. Five items were non-discriminating. There are five variables for which favorable comment discriminated between all three classes and eight which discriminate unfavorably. However, Class B, which, as already stated, is the discrepancy group because they were the boys who were predicted to develop delinquent careers and did not, is the most interesting class to compare with Class A.

Comparing Class A and Class B (again referring to Table VI), it can be seen that nine variables were not referred to favorably for either group and that five of the remaining variables which were referred to favorably were non-discriminating. For example, it can be seen that Intelligence was a slightly more unfavorable factor for Class B than for Class A. There are then eight variables which were mentioned favorably which did discriminate between Class A and Class B. An examination of these favorable comments revealed that the discrimination was not significant. So that we may say favorable mention of the several variables for Class A and Class B as a whole did not discriminate significantly.

A comparison between Class A and Class B in terms of whether or not unfavorable mention of the several variables discriminated between

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these two classes is somewhat more interesting. A careful analysis of Table VI shows that ten of the variables are non-discriminating and that twelve do discriminate between Class A and Class B.

Table VII (p. 46) lists the twelve items which discriminate between Class A and Class B. An examination of Table VII reveals that Mothers' Attitudes, Fathers' Attitudes, and Personality Traits would appear to discriminate significantly and thus would warrant further analysis. The remaining variables, listed in Table VII, discriminated in varying degrees between Class A and Class B although considerably less so than Parental Attitudes and Personality Traits.

Up to this point, all comparisons between the two groups, Class A and Class B, have been expressed in terms of percentages of the total number of occurrences of the variable whether favorable or unfavorable. It might, therefore, be of some interest to compare these two groups in terms of the number of boys in each group for whom these variables were present.

Parental Attitudes

Parental Attitudes, as was seen from Table VII, is a discriminating factor between Class A (the group predicted to be delinquent and turned out delinquent) and Class B (the group predicted to be delinquent but who turned out to be non-delinquent). For Class A it is found that ten of the total of fifteen boys in this class, or 67 per cent, suffered from adverse parental attitudes. In Class B we find that only three boys of the fifteen, or 20 per cent, had parents with unfavorable attitudes toward them. It will be recalled (see Appendix A) that under

TABLE VII

A COMPARISON OF THE NUMBER OF OCCURRENCES OF UNFAVORABLE
COMMENTS FOR ALL JUDGES FOR THOSE VARIABLES WHICH DIS-
CRIMINATE BETWEEN CLASSES A AND B

Variable	Class A	Class B	Difference (Expressed In per cent)
1. Mothers' Attitudes	2.28	.22	2.06
2. Fathers' Attitudes	2.05	.57	1.48
3. Personality Traits	2.73	1.59	1.14
4. Family Delinquency	1.02	.22	.80
5. Parental Social Adjustment	2.05	1.48	.57
6. Economic Status	1.36	.79	.57
7. Neighborhood	2.73	2.28	.45
8. Attitude Toward Delinquency	1.48	1.14	.35
9. Behavior with Others	1.48	1.14	.34
10. Behavior at School	1.25	1.02	.23
11. Home Adequate	.57	.34	.23
12. Home Broken	1.82	1.71	.11

TABLE I

Summary of results of the investigation of the effect of the concentration of the solution on the rate of reaction of the various substances with the reagent.

Concentration of solution			Rate of reaction
0.1M	0.1M	0.1M	0.1M
0.2M	0.2M	0.2M	0.2M
0.3M	0.3M	0.3M	0.3M
0.4M	0.4M	0.4M	0.4M
0.5M	0.5M	0.5M	0.5M
0.6M	0.6M	0.6M	0.6M
0.7M	0.7M	0.7M	0.7M
0.8M	0.8M	0.8M	0.8M
0.9M	0.9M	0.9M	0.9M
1.0M	1.0M	1.0M	1.0M
1.1M	1.1M	1.1M	1.1M
1.2M	1.2M	1.2M	1.2M
1.3M	1.3M	1.3M	1.3M
1.4M	1.4M	1.4M	1.4M
1.5M	1.5M	1.5M	1.5M
1.6M	1.6M	1.6M	1.6M
1.7M	1.7M	1.7M	1.7M
1.8M	1.8M	1.8M	1.8M
1.9M	1.9M	1.9M	1.9M
2.0M	2.0M	2.0M	2.0M

Parental Attitudes such items are listed as "rejects", "severe", "favors", "abusive", "no understanding", "indulgence", "overprotects", and in the case of the mother, "identifying the boy with an unfavorable father pattern". It was found that thirteen boys in Class A had parents who exhibited unfavorable attitudes as defined above. Three of these boys were rejected by the father, in two instances the father had no understanding, in two cases the father was severe, and in the case of one boy the father favored him but was on the other hand abusive. A total of eight of these boys then had fathers who exhibited unfavorable attitudes toward them.

We find, on the other hand, that among the boys in Class A there were five whose mothers rejected them, one whose mother was indulgent, and four cases in which the mother overprotected, and one instance where the mother identified the boy with the unfavorable father pattern. In eleven of these cases the mother exhibited unfavorable attitudes.

In three cases both the mother and father rejected, and in one instance the father was severe and the mother rejected the boy.

As already stated, we find that in Class B only 20 per cent, or three of the boys in this class had parents with unfavorable attitudes. In one case the father was severe, in another he rejected and in the third he favored an older child which might be construed as rejection. It is found that only one boy was overprotected by his mother and in one case the mother favored an older child.

It is clear then that for Class A and Class B Parental Attitudes markedly discriminated between them. This suggests that Parental Atti-

tudes should carry greater weight when endeavoring to predict delinquent behavior. Table VI shows that seven other items were more frequently mentioned than Mothers' Attitudes and that nine variables were mentioned more frequently than Fathers' Attitudes. This further illustrates that although the Selection Committee mentioned a number of other variables more frequently than Parental Attitudes, it does not follow that they were the ones which were the best predictors of delinquency except as they were so construed by the judges.

Personality Traits

It was found by an analysis of the distribution of items included under Personality Traits (see Appendix A) for Class A and Class B that there was no single item or group of items which discriminated between these two classes. Therefore, the only conclusion we can draw is that which can be seen in Table VII which indicates that Class A had more of these unfavorable or neurotic Personality Traits than did Class B. The only difference that could be found was that in Class A four boys had three or more items checked as unfavorable as contrasted with only one boy in Class B with three or more unfavorable items.

Family Delinquency and Parental Social Adjustment

Family Delinquency, as Table VII will show, discriminates between Class A and Class B. In this instance only parental delinquency is included. It is found that the parents of 33 per cent of the boys in Class A had a record of one or more arrests as against 6 per cent for Class B. Class C which, it will be recalled, was the group which was

predicted to be non-delinquent and turned out non-delinquent, had no parents with criminal records. The percentages for each group in regard to siblings who were delinquent, are 13 per cent for Class A, 26 per cent for Class B, and 6 per cent for Class C. If we consider the records for the whole family, we find 40 per cent for Class A, 40 per cent for Class B and 6 per cent for Class C. This indicates that although parental criminal record is a discriminatory factor between Class A and Class B, it also shows that siblings' delinquency is not a discriminating factor.

So far as Parental Social Adjustment is concerned, it is found that 66 per cent of the boys in Class A were living with parents who themselves were socially maladjusted, as against 33 per cent for Class B.

Economic Status

Regarding Economic Status it is found that 46 per cent of the boys in Class A as against 26 per cent in Class B came from families suffering economic deprivation. These figures include both dependent and marginal income levels.

Neighborhood

Of the boys in Class A 80 per cent came from unfavorable neighborhoods, or an area which was considered to have a high rating of delinquency or unusual opportunity to engage in delinquent activity. Sixty per cent of the boys in Class B also came from undesirable neighborhoods.

Other Discriminating Variables

The remaining variables seen in Table VII may be treated briefly since they do not significantly discriminate between Class A and Class B.

An interesting comparison between Class A and Class B is that of Attitude toward Authority. It is found by looking at Table VII that Attitude toward Authority discriminates slightly between the two groups, with more of the boys in Class A having poor attitudes toward authority. It is found, however, that in terms of the percentage of number of boys, 40 per cent of those in Class A had poor attitudes toward authority as against 53 per cent of those in Class B. It will be recalled that the percentages in Table VII were derived from the total number of occurrences of unfavorable and favorable items for all variables in all three classes of boys, so that actually the content analysis, as it pertains to these variables, gave the reverse of the true picture for Class A and Class B.

The variables Behavior with Others and Behavior at School, as recorded by the Selection Committee, do not markedly discriminate between Class A and Class B. Fifty-three per cent of those in Class A had greater difficulty in getting along with their peers and fought, teased and bullied more than those in Class B, but not appreciably since 46 per cent of those in the latter class had unfavorable comments regarding their behavior with other children. Likewise, Behavior at School, with 46 per cent of those in Class A and 40 per cent of those in Class B exhibiting misbehavior in school, does not significantly discriminate.

Regarding Broken Homes, there is general agreement that the child needs, for his optimum development, the presence of both parents in the

home who are well adjusted to each other and can provide love and affection and proper guidance for their children. If this thesis is correct, the converse should be true - that a home in which one or both parents are absent would have deleterious effects upon the development of a child. This might be particularly true if the absence of one or the other parent occurred as the result of a breakdown in the relationship between them after a long period of parental discord. The emotional tension in the home created by such parental disharmony might be expected to have an adverse effect upon the child. It is found that almost one-half, or 46 per cent of the boys in Class A, came from broken homes as contrasted with 53 per cent in Class B. Only 13 per cent of those boys in Class C, i.e., the group predicted to be non-delinquent and turned out non-delinquent, came from broken homes. Certainly a broken home does not differentiate between Class A and Class B in this study, with more of the non-delinquent boys coming from broken homes than the delinquents. Even the rate of separation was higher for Class B than for Class A. We may conclude, therefore, that for these particular groups a broken home was not a discriminating factor based upon the information obtained in the Selection Committee protocols.

As a result of the simple content analysis of the factors upon which the judges had based their early predictions, a list of twelve variables was discovered which in some degree discriminated between Class A (the group predicted to become delinquent and did become delinquent) as against Class B (the boys who were predicted to become delin-

quent and who did not follow delinquent careers). It was found that Parental Attitudes was markedly significant as discriminating between the two groups. It was also found that Personality Traits did also markedly discriminate but no particular configuration of traits could be found through the content analysis to discriminate between Class A and Class B. The remainder of the twelve variables (see Table VII - p. 46) did discriminate but not significantly so. It may be concluded that Mothers' Attitudes and Fathers' Attitudes should receive more weighting than any one of the other variables considered in this study.

CHAPTER IV

CASE STUDY ILLUSTRATIONS OF PREDICTION AND EVENTUATION

It has been found from the content analysis that Parental Attitudes was markedly significant as discriminating between Class A and Class B. Adverse parental attitudes undoubtedly contributed to the delinquent careers of those boys in Class A but it cannot be said that it was the only factor to account for the delinquency. It was pointed out (see Table VII - p. 46) that all twelve variables did discriminate between the two groups but it was probably the interplay of these and/or other unknown factors which contributed to the delinquency. In spite of this, it can be said that for the delinquent careerists considered in this study the inter-personal relationships within the family were significant factors in the development of their delinquent careers.

An examination of the case histories of the boys, with particular reference back to the Selection Committee ratings made prior to treatment, might show the interplay between the various variables recorded by the judges in their protocols. It might be shown in the additional information found in the case histories that Parental Attitudes was a significant factor in causing delinquency among this group of Class A boys. Certain patterns or configurations, which might cast more light on the differentiating factors, may be made more evident in studying the personality development of the boy through his case history.

The only thing that the boys in Class A and Class B have in common, as determined by a content analysis of the protocols, are the

twelve variables listed in Table VII (p. 46) which were present in some degree in both these groups. It cannot be said that any of the following case histories are representative of the group from which they are taken or of delinquent and non-delinquent boys in the general population. It will be recalled that the protocols of the three judges are presumably the factors on which they based their predictions. At least they were the factors which were considered most important by the three judges in making their predictions. It is well to remember that there were many intuitive and intangible factors which entered into the thinking of the judges and which do not appear in these protocols except by inference. As mentioned earlier these intuitive and intangible judgments constituted informal weightings based upon the experience of the individual judge.

A presentation of the judges' protocols and case histories of Charles, George, James and John follow. A discussion of four cases can only be suggestive. They do, however, substantiate to a degree the findings of the content analysis - that adverse parental attitudes bear a high relationship to the development of delinquent careers.

The following protocol is of Charlie whom Judge 1 and Judge 2 predicted to be a minor delinquent, their rating being final, since the ratings upon which any of the two judges agreed was accepted as the best rating for any particular boy. Judge 3 predicted that he would be a more serious delinquent but none of the three judges predicted that he would become an extremely serious delinquent, which he

did, as will be seen in the later case material.

No. 1 - Charles

Judge 1 - (-1): The center of his difficulty is at school where he has gained the disfavor of teachers in the past who continue to think of him in terms of his worst behavior with them. From a threateningly vicious fit of temper and profanity, he becomes pleasant and friendly when handled sympathetically. Resents correction to a degree which, with his aggressive and boastful attitude, spells difficulty. Some improvement this school year. Much would seem to depend on wise handling by the school where he would most quickly rebel because he feels most abused there. Mother concerned about him and is receptive when assistance is offered. Subject has defective vision. Destroys property. Father harsh, in discipline, which is administered arbitrarily. No criminality. State Temporary Aid in 1932 when father unemployed - no other.

Judge 2 - (-1): Intelligent boy from family of good standards and in a fair neighborhood. But boy was spoiled earlier and encouraged in temper tantrums. Now is violent when thwarted though much is bluster. Extreme threats. Father now over-severe and boy fears him. Mother criticizes this but threatens him with it. Responds to understanding treatment but has established a pattern of reaction over which he has little control. This makes social adjustment difficult and he may be pushed to the extent of trying to live up to his vicious bluster.

Judge 3 - (-2): Age $8\frac{1}{2}$ at time of most of investigation. The eldest of three children in a fairly well-supported home (dependent once for few months) but in a tense home atmosphere caused by father's excess discipline and severity, super-imposed upon a child who was early spoiled by relatives. 1936 teacher thought Subject a terrible problem, pugnacious, destructive and viciously bad tempered at times. Present teacher confirms his bad temper and dangerous explosions but says he has improved. Average intelligence and in right grade though has poor vision and hearing. No criminal records in family. Seems to be getting little satisfaction at home or in school, and is thus a risk.

We present herewith the story of Charlie as obtained from his mother, from official records, and from the youth himself during 1946 and 1947.

As may be judged from the above protocols, Charlie's school career was a stormy one. However, he passed each grade regularly, leaving school in the eighth grade without graduation. His average school work was considered fair and there was no record of truancy. He was considered "definitely anti-social and if dissatisfied with the teacher would leave the room and the school". He was not interested in other children and their activities because he was "too self-centered". Other children did not like him. However, there was no reason at this time to question his honesty, certainly in the school, although there had been reports of dishonesty on the outside.

He began his official delinquent career at the age of thirteen when he was first known to the court informally since his parents could not handle him. They reported that he was setting fires and that he was stealing pigeons and at this time he was referred to a child guidance clinic. Shortly thereafter he appeared in court on an attempted larceny charge and was sent to a psychopathic hospital for observation. During the period of observation he was impudent and profane and was diagnosed as a psychopathic personality without psychosis and supervision in a correctional institution was recommended. However, the court allowed placement at a small private school for problem boys; a few months later he ran away from the school and the superintendent did not want him returned. The parents were given another chance to supervise him at home and the boy was given a suspended sentence to a correctional school. During the next two months he ran away from home

twice and so the suspended sentence was revoked and he was committed to the correctional school. Within two months Charlie had run away from the school. He was returned and shortly thereafter ran away again, this time involved in a charge of breaking and entering and larceny. When Charlie was fifteen he was paroled from the correctional school and within three months he was back at the correctional school again. It was evident that Charlie's delinquent career was well started. Upon his release from the correctional school, he continued his delinquent career and at the age of seventeen, after the second offense of stealing an auto, he was committed to the prison colony. He was paroled at the age of eighteen but a few months later was re-committed to the State reformatory for larceny of automobiles.

Charlie had plunged on from one delinquency to another until at the age of nineteen he was serving a five-year indefinite sentence. He could not use the child-guidance clinic nor did he profit by placement in a private school, probation, suspended sentence or parole, and it appears that the only treatment that will keep him out of trouble is incarceration.

Why did he follow such a career? He was the oldest of six children; three girls and three boys.¹ The next oldest child was born when he was two years of age and the others followed in rapid succession thereafter. All the other children are doing well at home and in

¹ This is the number of children in the family in 1946. This differs from the number of children given in the protocols, when Charlie was only eight and one-half years of age.

school, according to all reports. The father has had his own contracting business; he is a good provider and a steady worker. Neither of the parents have a court record.

Interviews with the mother reveal a good deal about the causation of this boy's delinquent career. She was interviewed by two different follow-up workers who obtained substantially the same stories and impressions. At the time of the interviews, Charlie was eighteen and already in prison. She poured out a great deal of hostility against the school, the principal, and the teachers. She thought they were more or less responsible for Charlie's unhappiness in school because they made no attempt to understand him. She said that the youngest boy, age twelve at this time, was having similar trouble in school. Charlie, she said, had been unhappy and difficult in school from the very beginning. He was intelligent but with an uncontrollable temper. He was not understood by his father who abused him too much by giving him frequent beatings if he misbehaved. She exhibited a great deal of hostility toward her husband. He had refused to visit Charlie in prison although the youth had written to him twice requesting a visit. The mother thinks that the father is ashamed and fears that the boy's behavior might have some reflection on his business which seems to be the only important thing in his life. One minute she was praising him as being generous and explaining his behavior as due to his own poor early life, his mother and father having died when he was seven, and in the next breath she was threatening to divorce him. She said he com-

plained that she was more interested in Charlie than in him and the rest of the family.

She was very hostile to the courts and the police officers whom she felt were ignorant men and shouldn't be in such jobs.

She felt that they, the parents, have failed Charlie. She said she was married too young, nineteen, and did not understand him. She has done everything for him and has "run around everywhere" when he was in trouble.

She complained that the previous year she had a "nervous breakdown" and had to go away from home for some time to recuperate. She was very bitter toward the neighbors who tried to bring her stories of the misbehavior of her husband, while she was away at the beach with her children.

She said that Charlie belonged to no organized clubs; he had few friends and no close chum although, when he did seek out companionship, he tended to go with troublesome boys.

Charlie was interviewed in the reformatory at the age of nineteen and after he had been in the reformatory for the second time. He attempted to rationalize his offense which was larceny of an automobile.

Charlie said,

After all, it was just misappropriation - just a technicality. I was picked up in Evertsville and they found the car there and said I had stolen it. They found another car there and said I had stolen that, too.

Charlie wondered how he could drive two cars at the same time. In any

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event, he said he pleaded guilty and was returned to the reformatory. A check with the official record revealed that he and another youth had stolen both the cars and that he had not pleaded guilty but had appealed the case. Charlie said that he would try to go straight if he could when he got out but he wasn't going to be "pushed around". He wasn't going to stand having the cops come down to his house every time something happened and try to pin it on him. He hates the cops. "There are no good cops." Later, Charlie modified this to say, "Well, there may be two or three good cops." He said that everyone steals an automobile sometime; "They ought to give a guy a chance".

Charlie said he didn't like his father. He had worked for him for a short time when he had been out on parole but he didn't like doing so. However, it wasn't too bad since his father was "off in other states travelling" in connection with his business. "He's off somewhere all the time." Charlie believes that his father never paid much attention to him and his attitude was that he didn't care whether his father did so or not. Charlie said, "You have a friend and you ask him for a fin and he'll give it to you. But my father isn't like that. If you ask him for a fin he wants to know what you want it for and all about it."

He concluded the interview by saying, "You know crime really does pay. There are more people on the outside who get away with it. The ones you see here just got caught." As an afterthought he said, "As a matter of fact, I always got caught for some reason."

A check with the official record revealed that Charlie did not tell the full story of the offense for which he was given a five-year indefinite sentence. In addition to stealing the two automobiles with a companion, he had also stolen other articles. He was not caught at this time but a little later was found in a gas station and was apprehended only after a chase during which shots were fired to halt him. En route to the station house he threatened to kill one of the officers. He was sentenced to five years in the reformatory which he appealed and, while awaiting trial, he broke into another garage and was arrested while driving a stolen car. His defense in the earlier case was that he did not know how to drive a car.

It is difficult to find any person in this boy's life who was really sympathetic and understanding. It seems clear that he was severely rejected by the father as well as by an ambivalent mother. There was inconsistent training and discipline in the early life with the father extremely severe, giving the child frequent lickings, with the mother resisting but on the other hand threatening the boy with punishment from his father. It appears that Charles is primarily the product of adverse parental attitudes, particularly on the part of the father whom Charlie hates. His future outlook is evidently very poor.

When the judges' protocols on Charlie are examined, it is difficult to explain, in view of the unfavorable picture which they all present on this boy, why they did not predict a more serious delinquent career for him. One explanation which would also apply to other cases

is that the judges tended to be conservative in their predictions of delinquency. The majority of the boys in the total group of 650 were rated either -2 or +2 reflecting a basic conservatism. Judge 2 came the closest to recording the significant facts of parental attitudes but it seems that the boy's intelligence, the adequacy of the neighborhood and the family's living standards outweighed the other considerations. It is quite evident from this, the other protocols, and the content analysis that the judges mentioned most frequently those factors which are most commonly accepted as being related to delinquency, such as neighborhood, intelligence, school retardation, family, crime, broken home, economic status, etc.

Charlie is a representative of Jenkins' Type II, "Personality Structure"². Jenkins states that in these children the mother's home life is unhappy and that she is likely to have left home at an early age to get away from her parents. Neither parent wanted pregnancy and both parents, particularly the mother, denied him affection from the beginning. If the parents remain together the relationship is one of bitterness and disharmony. Mother is likely to be very unstable as perhaps the father, with both being violent tempered and abusive to each other and the children. He states that it is essentially a picture of "generalized and continued parental rejection beginning at or before

2 R. L. Jenkins, M.D. and Lester Hewitt, "Types of Personality Structures Encountered in Child Guidance Clinics," The American Journal of Orthopsychiatry, 14:84-94, January, 1944.

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the birth of the child". The child himself is filled with hostility and bitterness. He feels cheated in life and thinks of himself as the victim, although constantly the aggressor. He is grossly defective in social inhibitions and grossly lacking in guilt sense.³

As will be seen from the following protocols, George, like Charlie was predicted to be a minor delinquent but was also classified as developing a serious delinquent career, on the basis of a persistent pattern of delinquency although minor in nature and a commitment to a correctional school.

No. 2 - George

Judge 1 - (1): A physically overgrown boy of limited intelligence who is repeating grade I the second time and has reading difficulty and indistinct speech. General health below par. Home broken by separation of parents who have little or no interest in Subject and brother. Has had foster-home experience. Affectionate toward father but not reciprocated. Not behavior problem, but living in unfavorable neighborhood.

Judge 2 - (-1): Very inadequate personality - poor stock. Probably would get along passably under good supervision and companionship but at present seems unable to achieve much and feels very inferior. Rejected by parents and grandparents, will probably be little constructive help as he gets older. Could easily be led into petty delinquency.

Judge 3 - (-2): Age $9\frac{1}{2}$, the elder of two children living with paternal grandparents and paternal uncle. Father and mother divorced, and mother pays no attention; father little. Subject in grade I for three years, can't read, not healthy, overgrown and painfully self-conscious. Low average intelligence. Has great fear of women, after parents boarded him out at early age. Well-intentioned. Well-behaved. General home lacks and retardation forebode ill.

³ Ibid, p. 86.

George was originally referred to the CSYS, not as a school disciplinary problem but as a non-reader. The reader can see from the above protocol that it was predicted he would become a minor delinquent. At the age of 10 and one-half George and his brother Steve were living with the paternal grandparents where they had been for some years. The mother had deserted when they were in infancy and later the father divorced her and both of them remarried. The grandmother was fondly indulgent of the boys who had lived with her all their lives but she died when George was twelve. Others in the home at that time were a paternal aunt and her husband as well as a paternal uncle. The aunt subsequently set up a home of her own but did not take the boys with her, rationalizing that it would not be fair to her husband. She has manifested considerable guilt over a period of years for not taking the boys to live with her. However, she did maintain a close relationship with them and frequently had them in her home. George, in particular, exhibited considerable affection for her and for her children.

George, then, at the age of twelve began living with his father, his stepmother and their three children, given shelter and food after a fashion but little supervision or parental care. George subsequently went through a period of telling his tutor fanciful stories about family relationships which suggested that he was confused if not pretty disturbed about them.

This family moved a great deal and always lived in somewhat deteriorated sections where there was ample opportunity for delinquent activi-

ties.

George was a withdrawn, shy, sensitive boy with a veneer of sullenness who grew into a reticent, independent youth although not very reliable on the job. Given to drinking on occasions and shifting from one job to another.

George spent three years in the first grade and then barely passed until grade six, at which time he was sent to a correctional school and upon his return he did not return to school although under age.

At the age of nine he began to truant from school but this soon subsided after a few talks with his CSYS worker. He was also being tutored at the time. During the next year, when he was ten, tutoring was continued and George regaled his tutor with fantasies about family life. He expressed great bitterness toward his own mother for deserting him in infancy, he claimed that he knew where she was and that he had once called on her but she had denied that he was her son. When George was eleven it was thought that he could profit from psychiatric treatment but he failed to keep appointments and no one insisted that he should see the psychiatrist. George was now thirteen and was working nights in a milk distributing plant. He began to truant again and did so periodically during the rest of his school career. George disappeared from his home at about this time and the family claimed to know nothing of his whereabouts. After some six months, he returned home and revealed that he had been living with an uncle during the interval which was probably an escape from the dirty home, noisy half-

siblings and a father and stepmother who were not particularly interested in him. At the age of fourteen he was placed on probation for using his aunt's car without permission and a little later, in the company of others, he was found attempting to steal a car and was sentenced to the correctional school where he remained until he was almost sixteen.

George said that he had learned his lesson and would keep away from a gang of boys when he knew they were about to steal a car. George had seemed to be a passive participant and he himself could not understand why he did it. He obtained a job with a milk company but he lost it a few months later because he used one of their trucks without authority. He secured another job with another milk company and lost it after wrecking one of their trucks. George was under age at this time and so could not obtain a driving license. However, he obtained another job with another milk company but this time was delivering milk by horse and wagon.

When he was not quite sixteen George bought a car, placing it in the name of an older friend, but later transferring ownership of the car to his father. During this period George was smoking a great deal and was in arrears in collections on his milk route. The parents evidently knew little of what George was doing nor did they seem to be interested.

George, at the age of sixteen, was picked up for drunkenness, given a talk by the police and released. Also at this time he was associating with a bad gang. George's family was evicted from their

home and moved in with his step-grandmother, whereupon he moved out of the home and found a rooming house for himself. He continued drinking and talks with his worker seemed to have little effect. Shortly thereafter George set fire to his mattress in the middle of the night causing some damage for which he paid the landlady. He was drunk at the time.

George's caseworker found him wearing a veteran's pin which he said he had been given by a friend. He also had in his possession some of the friend's discharge papers which had given him the idea of altering them so that they would appear to be his. He had hoped thus to qualify for veterans' benefits. George was now almost seventeen and after the trouble at the boarding house he returned to live with his father and stepmother. At about this time he was short in his milk accounts by about \$75.00 and was frequently late to work and later lost his job because of this. He was associating with bad companions; one of them killed a man in a brawl and was convicted of manslaughter and sent to prison. The last that was known of George was that he had married after first getting the girl pregnant, but no more is known about him.

George's situation is in marked contrast to that of Charlie, reported above. Charlie had all the advantages of an adequate neighborhood, good home from a physical point of view, with adequate income.

Although George was the product of a broken home, the break occurred while he was still an infant and thus he was not exposed to years of wrangling and emotional tension between the parents. Instead he was reared through his formative years by a fondly indulgent grandmother

and grandfather who evidently gave him a feeling of being wanted. Although his father was a rather coarse individual and did reject him to some extent, he seemed to be a pretty passive fellow and was not in any sense severe.

George's protocols illustrate that the judges perhaps did not have adequate information concerning the attitudes of the grandparents, particularly the grandmother, who gave him adequate security although it is evident that George felt himself considerably rejected by the mother. He is a boy who was given adequate fundamental socialization in his relationship with his grandmother but following her death he was not adequately supervised and was left too much to his own devices on the street with the gang.

The following boy, James, as will be seen from the protocol, was predicted to become a minor delinquent. He turned out to be markedly non-delinquent. If the judges' comments for James are compared with those of Charlie it will be seen that James, judging from his protocol, did not have so many unfavorable factors against him as did Charlie, nor was his behavior as aggressive.

No. 3 - James

Judge 1 - (-1): Has average intelligence which is utilized to good advantage in school where presents no problem. The home and play situations give the chief causes for concern because of Subject's lack of supervision and affection through the death of the mother, the father's absence from the home by night work, and his inability to command Subject's respect or obedience. Subject involved with undesirable associates in much street activity which gives father concern. Subject shows undesirable habits and attitudes. His rather favorable school adjustment is counted on as a stabilizing influence in future.

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APPENDIX

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Judge 2 - (-2): Unhappy boy, soft looking, probably has inferiority feeling which father unwittingly increases. Father and boy do not understand each other, growing farther apart. Father has superiority. Unless this situation is changed boy would react away from father's advice and likely become delinquent since he shows tendency to follow tough companions, naturally.

Judge 3 - (-1): A 10-year old boy, eldest of three children of native parents. Mother died three years ago. Home now has father, maternal grandmother, maternal aunt and two siblings. Father is a contradictory sort, easy-going with adults but harsh on Subject. Father calls him sullen, brooding, disobedient. Has average intelligence and does well in school but is extremely shy and nervous. No economic problem at home; fair neighborhood. Might be all right apart from father but, lacking this, might rebel seriously later.

James is now nineteen years old and at eighteen graduated from the high school with a respectable record.

Since the death of his mother, when he was seven years old, he has lived with his two younger siblings, both girls, with his father, and with the maternal grandmother. The eldest girl graduated from high school and is now satisfactorily married. She is a quiet, sensitive individual, pretty much dominated by the grandmother who is an aggressive, dominant person who did not seem to have much love for the father; claimed that he hadn't much interest in the children. The grandmother, in the presence of the interviewer, attempted to get the girl to agree with her. She shyly admitted that he hadn't bothered too much with them but it wasn't an admission that she readily agreed to. It was quite evident that the grandmother was the dominant person in the family; this applied to James as well as the others.

James has been very much interested in music and art for several

years and has taken lessons in both for which his father has paid. He was interested that James should continue with his music. There were no complaints whatever about James from the home or the school and he has never been in any delinquent activity. He is a regular church attendant. James' friends likewise have never been troublesome and likewise have an interest in music and have formed an orchestra and have earned extra money by playing at dances at the school.

James is a serious youth, rarely smiled during the follow-up interview, and volunteered very little. He seemed to be a passive, quiet, and rather withdrawn individual. He had no particular job interests but did wish to continue with his music. He stated that his father had paid for his drawing and music lessons but stated that he wouldn't be able to do that much more, that he would have to get a job of some kind for himself.

He has always been interested in baseball and football, hockey and swimming, which he used to play a good deal but finally gave most of them up in favor of music and drawing. However, he continues to play baseball occasionally. From the age of twelve to thirteen he collected stamps and did airplane modelling. The latter he continued up until he was a senior in high school. James said he knew a large number of fellows in his area but admitted he only had a few close friends. He had never belonged to a real gang except those groups which were organized for baseball and football. He never believed in hanging around the corner or belonging to any large gang because he believed that this

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was a sure way to get into trouble. Jimmy felt that he has gotten along well with his siblings and his father at home and there was some evidence that he accepted his father's control. James said that his father would not stand for truanting or any other such behavior and he related a story that when he was twelve years old he began to smoke. His father caught him at it and so Jimmy gave it up. He admitted that he did some minor stealing in the stores when he was about ten or eleven and he thought that this went on for a two-year period but it was not frequent, however.

James is a tall youth of six feet, weighing in the vicinity of two hundred pounds. He looks to be a rather soft and pliable youth, his face covered with acne and definitely a reticent and retiring individual.

James, it will be observed, was a boy who was predicted to become a minor delinquent but who turned out to be markedly free from delinquency. It is evident that the Selection Committee considered the father's attitude toward the boy to be the critical factor in his development. James presents a picture of a boy who is considerably inhibited perhaps because of the repressive dominating grandmother.

John, whose protocol and case history follow, was also predicted to become a minor delinquent but he turned out to be markedly free of delinquency as did James.

No. 4 - John

Judge 1 - (-2): Performance is close to, if not at, feeble-minded level. Two years retarded, left-handed, speech difficulty, active in unsupervised gang adven-

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APPENDIX

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tures. Enuresis. Some stealing already (no episodes related). Untruthful, stubborn, resentful. Parents are practically illiterate and father a laborer. Home unfavorably situated in Somerville's "Brick Bottom". No S.S.I.

Judge 2 - (-1): Very dull, speech difficulty, inclined to be aggressive, and claim recognition. (Sly and stealing?). Vague picture of home situation and parental attitudes. Family have been self-sufficient and no significant records. Uncertain on account of lack of information.

Judge 3 - (-1): Age $9\frac{1}{2}$, the fifth of seven children of non-English speaking Italian parents who have avoided delinquency. Father once arrested for disturbing the peace, filed. Live in crowded industrial area. Subject is retarded about two years and is only in grade II and not to be promoted; recommended for special class. Teacher in 1936 said his chief trait was stealing but present teacher says "nothing mean about him" but would be difficult if not supervised. Plays outside with gang and has little supervision. Left-handed.

John was followed up at the age of eighteen and information was obtained from him, his relatives, the school and the police.

John and his family have always lived in an area of high delinquency but at the time of the follow-up visit it was observed that the home itself was in excellent condition inside and out, reflecting high housekeeping standards.

John attended the junior pre-vocational school from the third to the eighth grade and when at the age of sixteen he left school. The junior pre-vocational school is for children who are too dull to get along in the regular classes. His behavior record at school was very good, he was never a trouble-maker, had excellent initiative, was congenial, and got along well with other children. He was liked by all the class and his honesty was unquestioned. Before arriving at the pre-

vocational class John had spent four years in the first grade. He passed the second grade successfully but repeated the third. He managed to pass the fourth grade and finally at the age of fourteen was placed in the special class.

John stated that he never liked school. He was always bigger than the other children and they teased him about it. As a result he fought back and was frequently in trouble and in general his school experience was an unhappy time for him. He had always wanted to go to work and would much rather have done so than remain in school. He believes that some boys should be allowed to leave school if they would rather go to work.

Upon leaving school at sixteen John got a job in a slaughterhouse where he has worked regularly up to the present time. He now receives \$40.00 a week. He gives his full check to his mother and she gives him an allowance.

John readily talked about his occasional truancy and stealing from the stores. The reason he didn't truant very much was because he would get caught and be punished by his parents. Likewise, he refrained from stealing because he feared beatings from his family. He has had the usual boy's interest in sports, has travelled with a good gang and was only known to the police once for destroying property and breaking windows.

Johnny is a friendly, courteous, poised and mature young man who "has nothing to complain about".

It is very evident that the parents and older siblings accept him

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and his low intellectual endowment for which he has compensated very well. They evidently have exerted a strong, supervisory control to which this huge, well-built, friendly youth has submitted without question. His successful work history has been a source of great satisfaction to him as well as to the members of his family. His mother said,

He no learn good in school - he worka very good now - he smart in all kinds of business. When I try to say to him, "Johnny - I no live forever - I do not like for you to be forever over in the slaughterhouse - I like you have a better job"; he say, "By-and-by Mama I be the boss of the job".

It is evident that the Selection Committee, judging from the protocols listed above on John, did not have accurate information of the home situation and parental attitudes. It is clear that this boy's chief handicap was an inferior intellectual endowment. His sense of inferiority because of this and his large size, tended to great dissatisfaction in school. The fact that he did work part time from the age of twelve to the age of sixteen in the slaughterhouse, in which he has been steadily employed since leaving school, is probably a compensating factor. However, basically, there seems to be no question that this child received much warmth, affection and love from the various members of his family. On the whole, they recognized his intellectual limitations and supervised him pretty closely and strictly.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

It will be recalled that the purpose of this study was to determine the validity of certain predictions of delinquency which were made on a group of 650 boys under the age of twelve at the Cambridge-Somerville Youth Study in 1938. The basic question is concerned with whether or not it is possible, given certain information, to predict delinquent behavior by the case study method. A few questions were posed at the outset: How accurate were the judges in making their predictions? Where did they fail and why? What were the factors which were considered by the judges to be of predictive significance as recorded in their protocols? What factors, if any, discriminated between the delinquent and non-delinquent groups? What implications are there, if any, regarding the etiology of delinquency? A subsidiary question is concerned with the possible implications for the CSYS treatment program in delinquency prevention. Are the findings of this study of sufficient significance to justify the time and expense of a more detailed study of prediction?

Table IV (p. 33) shows that out of the total of one hundred cases, fifty control and fifty treatment, considered in this study, 14 per cent turned out as predicted, 9 per cent eventuated worse than predicted, and 77 per cent came out better than predicted.

This finding suggests that it was practically impossible for the judges to predict accurately the degree of delinquency or non-delinquency on the basis of the information at hand and on such a refined instru-

DECLARATION OF INDEPENDENCE

When in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. — That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, — That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, in such a case, wisely suggests that a good People ought to be able to do this, when it is necessary, without bloodshed. Still, when a long train of abuses, premeditated and systematic, proving that the design is to reduce them to absolute Tyranny, compels them to alter their former System of Government, the People have a Right to throw off such Government, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.

History has been the scene of repeated instances of the abuse of Power, and of the oppression of the People by a few. The People have often been the victims of the same. The People have often been the victims of the same. The People have often been the victims of the same.

ment as the 11-point scale. There was a consistent under-prediction; i.e., the judges tended to predict less rather than more success. An explanation of such a high rate of under-prediction may be found in the fact that the judges tended to be conservative in their predictions of delinquency. The distribution of the ratings given by the three judges for the 650 cases was markedly bimodal with the majority of the boys being rated -2 or +2. Taylor stated that,

The occurrence of a bimodal distribution suggests that in making a prediction the judge first decided whether the rating was to be + or -, and then selected a numerical rating. Such a procedure might lead one to reserve a 0 rating for these cases which one is unable to classify as + or -, and also to use 2 as the most typical numerical rating.¹

The fact that fifty out of the one hundred boys considered in this study were from the treatment group raised the question as to whether or not treatment could have accounted for the consistently better outcomes as compared with the predictions.

Table II (p. 30) shows that for the treatment group nine boys, or 18 per cent, eventuated as predicted. Three boys, or 6 per cent, turned out worse than predicted, and that thirty-eight boys, or 76 per cent turned out better than predicted. Table III (p. 32) presents a somewhat similar picture for the fifty control boys. Five boys, or 10 per cent, eventuated as predicted. Six boys, or 12 per cent, turned out worse than predicted, and thirty-nine boys, representing 78 per cent,

¹ Donald W. Taylor, "An Analysis of Predictions of Delinquency Based on Case Studies," The Journal of Abnormal and Social Psychology, 42:46-56, January, 1947.

turned out better than predicted. It is readily seen that the better outcomes are slightly in favor of the control group when it would be expected that the reverse situation would prevail only in a more marked degree. This suggests that the consistent under-prediction cannot be explained by the fact that fifty of the one hundred boys received treatment.

Another aspect of the same question is concerned with the number of delinquent boys in the treatment and control groups. It was found (see Table V - p. 34) that twenty-eight boys in each of the treatment and control groups were predicted to become delinquent. Six of the twenty-eight treatment boys did become delinquent, representing 21.14 per cent. Of the twenty-eight control boys predicted to become delinquent nine, or 32.14 per cent, did develop delinquent careers. This represents a somewhat more favorable outcome for the treatment group, but the difference is not great enough to account for the judges' under-predictions. The fact that there were fewer delinquents in the treatment group suggests the possibility that treatment may have been somewhat effective in preventing delinquency; however, the sample is too small to draw definite conclusions.

A clearer and more hopeful finding is seen when the predictions are compared with the outcome for the same one hundred boys on the basis of their subsequent delinquency or non-delinquency. Table V (p. 34) shows that of the one hundred treatment and control boys thirty-nine were predicted to be non-delinquent. Thirty-eight eventuated as non-delinquent with only one doubtful case. It is significant that not

one of these thirty-nine boys became delinquent. Thus we see that these boys, classified as non-pre-delinquent by the judges ("plus" boys), rarely, if ever, develop delinquent careers as judged by this study.

Table V also shows that out of the fifty-six boys predicted to become delinquent only fifteen boys, or 26.78 per cent, actually developed delinquent careers. The remaining forty-one boys, representing 73.21 per cent, turned out to be non-delinquent. It was immediately apparent that these forty-one boys, who were predicted to become delinquent and who did not, Class B, were the critical group because the predictions failed to be borne out.

It was thought that a content analysis of the items on the judges' protocols for a selected number of this group of forty-one boys compared with the delinquent group, Class A, might show some discriminating factors between Class A and Class B. It was found, as an examination of Table VII (p. 46) will show, that twelve variables which received unfavorable mention did discriminate between Class A and Class B. An important finding is that Mothers' and Fathers' Attitudes and Personality Traits markedly discriminate between Class A and Class B with the former receiving a preponderance of unfavorable mention of these items. A further examination revealed that there were thirteen boys out of the fifteen in Class A (delinquent) who had parents with poor attitudes toward them as against only three of the boys in Class B (those who were predicted to be delinquent but who eventuated non-delinquent). An examination of the judges' protocols for four cases, along with the subsequent case histories, pointed up the fact that parental attitudes help

determine what the development of the child would be in regard to delinquency or non-delinquency. This case material is too limited to be conclusive but it is suggestive.

The protocols illustrate the kind of material upon which the analysis of the predictions was based. A careful analysis of the protocols does show a relationship between the variables which did not appear, of course, in the content analysis. It is clear the judges made little or no effort to record some of the more intangible weightings which were undoubtedly present in their thinking. A study of the protocols suggests the desirability in future prediction studies, of establishing specific factors classified as favorable and unfavorable. It seems to the present writer that a greater effort to establish criteria upon which the predictions were based would not be inconsistent with the clinical or case study approach to the prediction of delinquency.

The case histories do cast some light as to why the predictions were inaccurate, as well as pointing out the personality development of the boys. The protocols and case histories which were presented suggest the desirability of a more detailed study of a larger number of cases.

An analysis of the distribution of items included under Personality Traits for Class A and Class B revealed that no single item or combinations of items discriminated between them. It may only be concluded that Class A possessed more of these unfavorable traits than did Class B.

The remaining nine variables shown in Table VII (p. 46) which received unfavorable mention by the judges do discriminate between Class A and Class B but not significantly so.

The question as to why the judges failed to predict Class B accurately cannot be definitely answered from this study. Table VI (p. 41) suggests that the judges were influenced by the factors which are commonly associated with delinquency. The variable which the judges mentioned more frequently than any other was Neighborhood. Second in frequency were comments about Intelligence, and third, Personality Traits. Mothers' Attitudes and Fathers' Attitudes were eighth and tenth respectively on the list in terms of frequency of mention. Yet Parental Attitudes was at the top of the list in terms of discriminating between the delinquent and non-delinquent boys.

The inaccuracy of the predictions for Class B may also be due, to some extent, to the difficulty of determining whether a boy under the age of twelve, who exhibits both neurotic and delinquent behavior, will turn out to be delinquent, neurotic, or a neurotic delinquent. It may well be that our present knowledge is not adequate to make such a differentiation for young children. However, the findings of this study imply that a comparative case study analysis of a larger group is indicated. Such a study should include those predicted to become delinquent, and who did not become delinquent; those predicted to become delinquent and who became non-delinquent; and those predicted non-delinquent who eventually became non-delinquent. A definitive answer as to the question of why the judges failed in their predictions of Class B depends upon further researches.

The findings of this study that adverse parental attitudes and personality traits of the boy discriminated delinquent from non-delinquent

boys also suggests a more comprehensive study on a larger group of boys. These discriminating variables should carry heavier weightings in future studies of prediction.

The CSYS has in its possession a great amount of detailed information for 650 boys which presents an unusual opportunity for the continued study of the prediction of delinquency whether from the case study or actuarial point of view.

It is possible, for example, to use the same information which was available to the Selection Committee in 1938 and to make new predictions of delinquency; obviously these predictions would have to be done by persons who had no knowledge of the boys' subsequent behavior. The predictors' criteria should be recorded in greater detail and more specifically than was the case with the Selection Committee protocols. In these new predictions, parental attitudes would be more heavily weighted as the findings of this study suggest.

These new predictions could then be compared with the outcome and a further refinement of method might be arrived at. This same process could be carried on by other predictors using both the actuarial and the case study approach.

In addition to the Selection Committee, a number of other people at the CSYS such as psychologists, home visitors, and teachers made predictions of delinquency in 1938 or earlier for both the treatment and control groups. A comparison of the predictions made by these several people with the outcomes might well be profitable.

It should be pointed out that such studies made on the one hundred

boys used in this study would be greatly simplified because the time-consuming task of determining delinquency status at age seventeen and one-half has already been done.

Since the CSYS, so far as this writer can determine, is the pioneer in the empirical and systematic study of the predictions of delinquency in young children, it would be unfortunate if it did not continue to make use of its wealth of material in furthering the advancement of knowledge in the field of prediction.

BIBLIOGRAPHY

Books

- Allport, Gordon W., The Use of Personal Documents in Psychological Science. New York: Social Science Research Council, 1942.
- Barnes, Harry Elmer, and Negley K. Teeters, New Horizons in Criminology. New York: Prentice Hall, 1943.
- Baylor, Edith M. H. and Elio D. Monachesi, The Rehabilitation of Children. New York: Harper and Bros., 1939.
- Burgess, E. W. and J. Landesco, Parole and the Indeterminate Sentence. Illinois State Board of Parole, 1928.
- Glueck, Sheldon and Eleanor T., Criminal Careers in Retrospect. New York: The Commonwealth Fund, 1943.
- _____, Juvenile Delinquents Grown Up. New York: The Commonwealth Fund, 1940.
- _____, 500 Criminal Careers. New York: Alfred A. Knopf, 1930.
- Horst, Paul, and others, The Prediction of Social Adjustment. New York: Social Science Research Council, 1941.
- Kvaraceus, William C., Juvenile Delinquency and the School. New York: World Book Company, 1945.
- Reckless, Walter C., Etiology of Delinquent and Criminal Behavior. New York: Social Science Research Council, 1943.
- Sheldon, W. H., The Varieties of Human Physique. New York: Harper and Bros., 1940.

Periodicals and Reports

- Cabot, P. S. deQ., Search for Tomorrow's Delinquents. Unpublished manuscript in the files of the Cambridge-Somerville Youth Study, Cambridge, Mass., 1943.
- Federal Bureau of Investigation, Uniform Crime Reports for the United States and its Possessions. Volume XVII, Number 2, Annual Bulletin, 1946. Washington: Government Printing Office, 1947.

CHAPTER I

THE

THE first part of the book is devoted to a general survey of the subject, and to a discussion of the various theories which have been advanced to explain the origin of the human race.

The second part of the book is devoted to a detailed examination of the various theories which have been advanced to explain the origin of the human race.

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The tenth part of the book is devoted to a detailed examination of the various theories which have been advanced to explain the origin of the human race.

The eleventh part of the book is devoted to a detailed examination of the various theories which have been advanced to explain the origin of the human race.

CHAPTER II

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The second part of the book is devoted to a detailed examination of the various theories which have been advanced to explain the origin of the human race.

- Glueck, Eleanor T., "The Family, the School and Crime," Vital Speeches of the Day, 1:515-520, May 6, 1935.
- Jenkins, R. L. and Lester Hewitt, "Types of Personality Structures Encountered in Child Guidance Clinics," The American Journal of Orthopsychiatry, 14:84-94, January, 1944.
- Murphy, Fred J., and others, "The Incidence of Hidden Delinquency," The American Journal of Orthopsychiatry, 11:485-492, July, 1941.
- Powers, Edwin, The Story of the Project; from the Birth of the Idea Down Through the Close of the Treatment Program. Unpublished manuscript, Cambridge-Somerville Youth Study, Cambridge, Mass., 1947.
- _____, Cambridge-Somerville Youth Study Manual. Unpublished manuscript, Cambridge-Somerville Youth Study, Cambridge, Mass., 1942.
- Schneider, Captain Alexander J. N., "Prediction of Behavior of Civilian Delinquents in the Armed Forces," Mental Hygiene, 28:1-20, July, 1944.
- Taylor, Donald W., "An Analysis of Predictions of Delinquency Based on Case Studies," The Journal of Abnormal and Social Psychology, 42:45-56, January, 1947.
- Topping, Ruth, "Case Studies of Aggressive Delinquents," The American Journal of Orthopsychiatry, 11:485-492, July, 1941.
- Vold, George B., "Prediction Methods Applied to Problems of Classification within Institutions," Journal of Criminal Law and Criminology, 26:202-209, July, 1935.

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APPENDIX A
DESCRIPTION OF VARIABLES IN PROTOCOLS

The list of twenty-two variables in the order of the frequency of their appearance with the item considered as a component part of the variable, or definitions of the variables as used in the study of prediction.

1. Neighborhood: Refers to the home neighborhood in terms of whether or not it was in a delinquency area.
2. Intelligence: This simply refers to the intellectual endowment and a judgment was made by the writer as to whether or not an individual judge considered the boy's intelligence unfavorably or favorably. An intellectually dull child would be considered as having unfavorable intellectual endowment.
3. Personality Traits: All of these traits were considered unfavorable and were usually descriptive of the neurotic personality, or at least a maladjusted individual: Enuresis, thumb-sucking, tics, nervous, pre-psychotic, neurotic, nightmares, speech-defects, temper-tantrums, solitary, withdrawn, unhappy, moody, inadequate, insecure, inferior, day-dreams, timid, fears, conflict, sensitive, shy, distractible, impulsive, girlish play.
4. School Retardation: Refers to a child one or more years retarded, and conversely, a favorable rating indicates a child properly placed or advanced for his age.
5. Parental Supervision: This includes training, discipline and ade-

THE HISTORY OF THE
CITY OF BOSTON

1. The first settlement in the city of Boston was made in 1630 by a group of Puritan settlers who came from England. They were led by John Winthrop, who gave the city its name, Boston, in honor of the town in Lincolnshire, England.
2. The city of Boston was one of the first to be founded in North America. It was the first city to have a harbor, and it was the first city to have a university.
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quate parental control over the child. The judges usually stated specifically whether or not they considered parental supervision favorably or unfavorably.

6. Delinquency Status: This refers to whether or not the child was already engaging in delinquent activities at the time the predictions were made and includes the following: Stealing, truancy, gang-stealing, destructiveness, poor companions, lacks ethical standards, unreliable, liar.

7. Parental Social Adjustment: On the unfavorable side it included such things as a forced marriage, illegitimacy, a marital discord, drinking and low standards of living. A favorable mention would indicate the absence of these factors and would refer to relatively harmonious family groups, with the parents well adjusted.

8. Mothers' Attitudes: Includes such items as rejection, indulgence, over-protection, identifying the boy with the father when the father is a poor pattern, essentially indicating a rejecting mother. Would also include favoring other siblings, severity of punishment.

9. Behavior at School: Indicates whether or not a child was a behavior problem in the school causing sufficient difficulty to require special attention.

10. Fathers' Attitudes: Includes the items mentioned under number eight above.

11. Family Delinquency: An unfavorable mention indicated that one or more members of an immediate family had a criminal record and usually meant a rather serious record as to frequency of offenses.

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12. Home - Broken or Unbroken: Refers to children whose homes were broken by the death or absence of one or both parents.
13. Economic Status: An unfavorable mention means that the family was dependent upon social agencies for support or were very near a dependency level with the income being inadequate. Usually the judges mentioned specifically whether they considered this variable favorable or unfavorable.
14. Attitude toward Authority: Sometimes this was mentioned specifically as favorable or unfavorable; otherwise mention of defiance, resentment to authority, disobedience and stubbornness were considered as reflecting an unfavorable attitude.
15. Home - Adequacy or Inadequacy of: Refers essentially to the physical condition of the home.
16. Fathers' Personality: Such items as inadequate, not good pattern, neurotic were considered unfavorably.
17. Health: This refers to physical handicaps and includes defective vision or hearing, heart trouble, overgrown for his age.
18. Mothers' Personality: Essentially the same as the items listed under number sixteen. From the clinical point of view it was difficult sometimes to differentiate between personality and attitude; for example, maternal rejection in addition to indicating an attitude also indicates a type of personality organization. However, such attitudes were not included under personality.
19. Status of Siblings: From the context of the individual protocols, it was clear that if one or more siblings was neurotic, feebleminded, or dull, delinquent, retarded in school, or a behavior problem at school,

it meant that this was considered an unfavorable influence as far as the individual boy was concerned.

20. Behavior with Others: Some variables or factors are quarrelsome, fights, bullies, teases.

21. Behavior at Home: No specific items mentioned. The judges, when they considered it at all, usually mentioned specifically that the boy's behavior at home was good or bad.

22. Heredity: This was mentioned most frequently by the psychiatrist¹ member of the committee under the term "poor" or "good stock".

Approved,



Richard K. Conant, Dean

¹ The above list with the sub-items simply serves as an indicator of what items were considered under the various variables. No items were included but only those which were most frequently mentioned. It will be noted also that descriptive terms indicating a favorable item are but rarely listed. As will be seen from the text, favorable items were much less frequently mentioned as compared with the unfavorable items. The latter assume greater significance for this study than do the favorable items.

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample, the data collection methods, and the statistical analysis.

3. The third part of the report is a presentation of the results of the study. It includes tables, figures, and text describing the findings.

4. The fourth part of the report is a discussion of the results and their implications. It discusses the strengths and limitations of the study and suggests areas for further research.

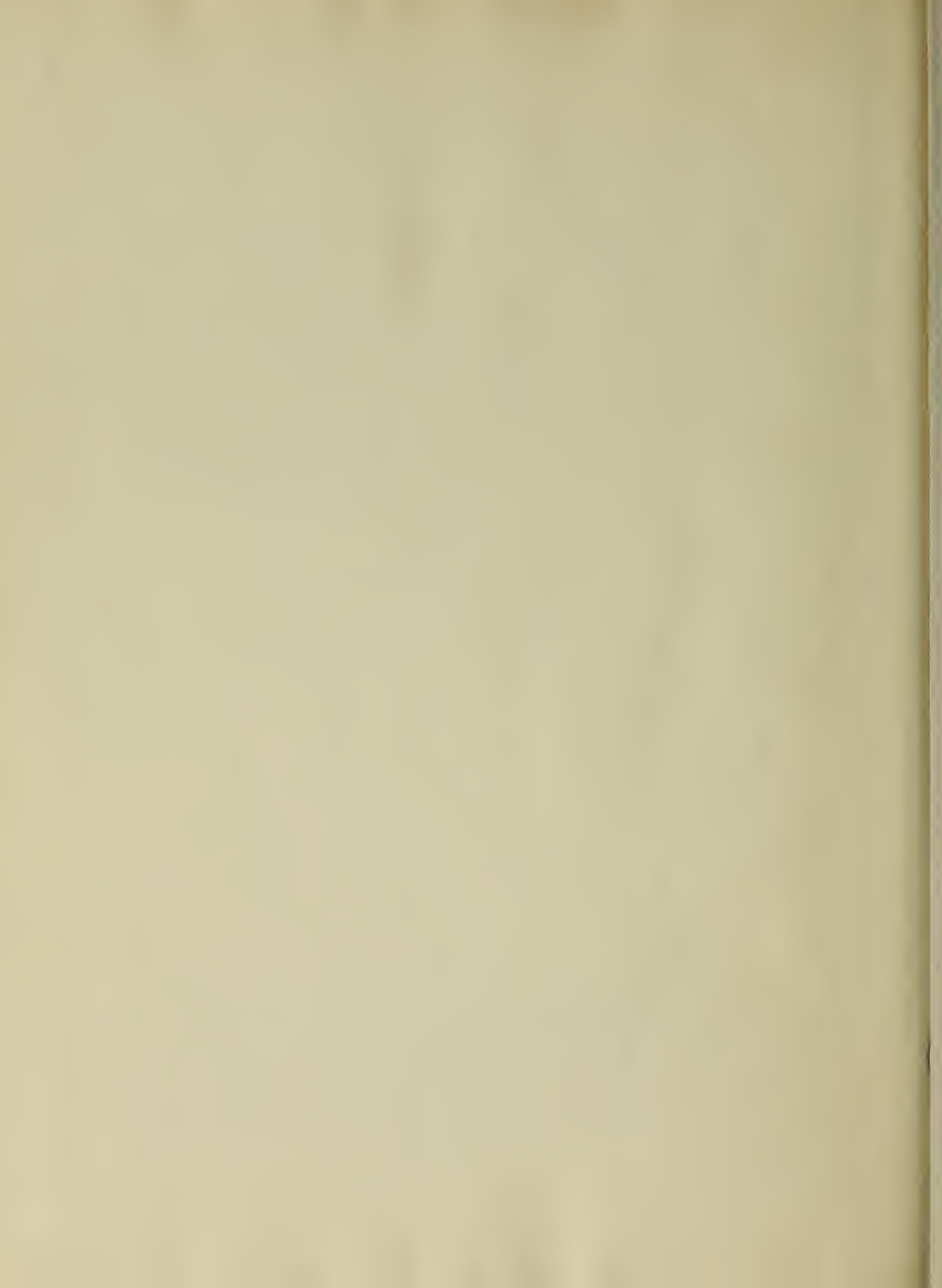
5. The fifth part of the report is a conclusion and summary of the findings.

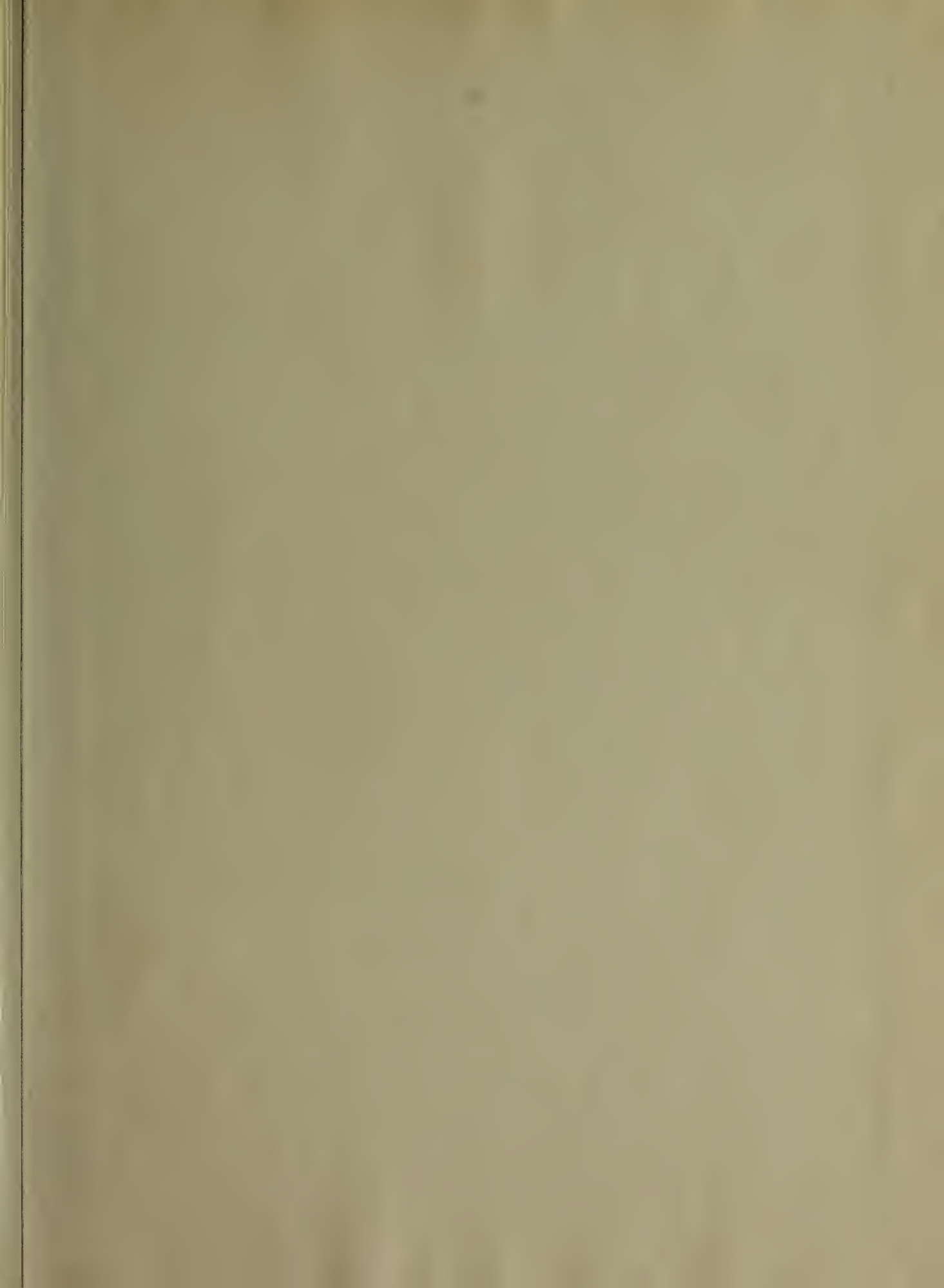
I am sure that the results of this study will be of great value to the field of research. The study has provided a comprehensive overview of the subject and has identified several areas for further research.

The study has also provided a detailed description of the methodology used, which will be helpful to other researchers in the field.

Finally, the study has provided a clear and concise presentation of the results, which will be helpful to both researchers and the general public.







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